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Management of black bears in Montana

FINAL
ENVIRONMENTAL IMPACT STATEMENT

MANAGEMENT OF BLACK BEARS

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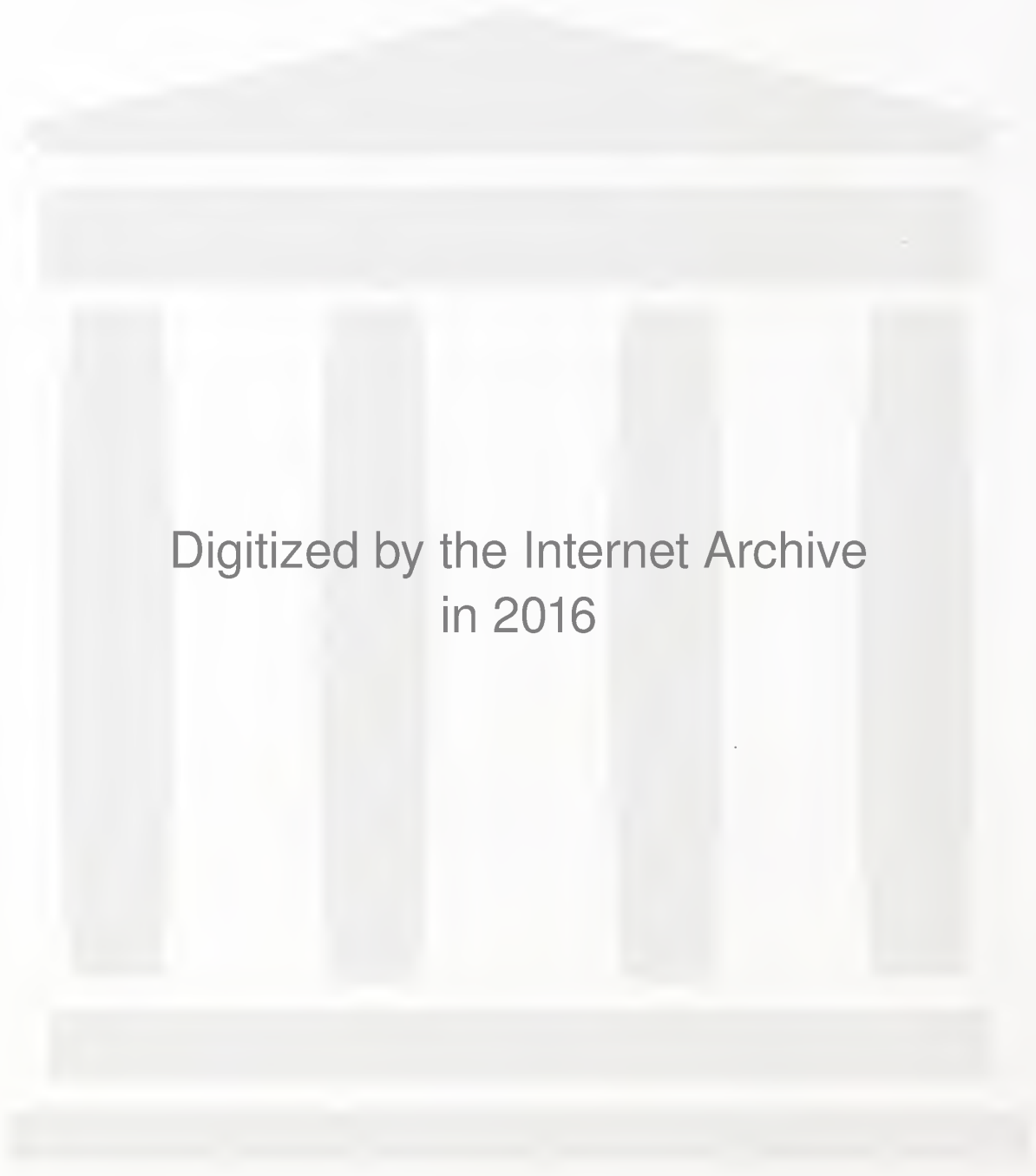
January 1994

Montana Department of
Fish, Wildlife & Parks

Patrick J. Graham

Director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COVER SHEET

Type of Statement

Final Environmental Impact Statement (FEIS)

Action

Management of Black Bear Populations in Montana

Lead Agency

Montana Department of Fish, Wildlife and Parks

Management Authority

Montana Department of Fish, Wildlife and Parks

Abstract

The FEIS describes five approaches to managing Montana's black bear populations; the process used to formulate the five alternative actions; the environment and processes that would be affected by each of the alternative actions; and the expected environmental consequences of implementing each alternative action. The potential effects of each action on black bear populations, recreational opportunity, regulation of harvest, assessment and monitoring of black bear population trend, illegal exploitation, economy of local communities, program funding, and the incidence of human/black bear conflicts, are described. Four of the five alternatives include hunter harvest as a management tool. One alternative does not incorporate hunter harvest. Issues and concerns voiced by the public are addressed in the FEIS, as well as public comment on the draft EIS.

For further information, please contact:

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Montana Department of Fish, Wildlife & Parks

Helena, Montana
January 20, 1994

TO ALL INTERESTED PARTIES:

This environmental impact statement (FEIS) has been prepared by the Montana Department of Fish, Wildlife and Parks (FWP) and is available for public review. The FEIS describes five approaches to managing Montana's black bear populations and presents the expected environmental consequences of implementing each of five alternative actions.

A Draft EIS was released by FWP for review and public comment on November 8, 1993. One hundred and fifteen comment letters and telephone calls were received during the comment period which ended December 7, 1993. The public was also afforded the opportunity to provide input at three public hearings held in Kalispell, Helena and Billings during the month of November.

This final EIS does not contain major changes from the draft EIS. However, it does incorporate corrections and clarification of the content of the draft EIS. Letters and oral comments provided by the public, as well as FWP responses, are presented in the Appendix.

Following publication of this FEIS, FWP will decide which of the five alternatives to adopt. The department can make this decision no sooner that 15 days after release of the final EIS to the public. This decision will be made in conjunction with a meeting of the FWP Commission on February 7 and 8, 1994. At this meeting, the FWP Commission will finalize 1994-1995 regulations pertaining to black bear hunting. The chosen alternative will be the basis for an updated black bear management plan for Montana black bear populations.

Additional information, or a copy of the final EIS, may be obtained by contacting FWP at the following address: Wildlife Division, MDFWP, POB 200701, Helena, MT 59620-0701.

Sincerely,

Pat Graham

Patrick J. Graham
Director

PREPARERS, CONTRIBUTORS AND CONSULTATION

In addition to the public participation process, FWP consulted and coordinated with representatives of other public agencies that have responsibilities with respect to black bear management in Montana:

Larry Handegard State Director, Animal Damage Control (ADC), U.D. Dept. of Agriculture. Billings

All National Forests in Montana: Beaverhead NF, Bitterroot NF, Custer NF, Deerlodge NF, Flathead NF, Gallatin NF, Helena NF, Kootenai NF, Lewis and Clark NF, Lolo NF and Northern Region USFS office in Missoula.

Bureau of Land Management: Billings state office.

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MONTANA BLACK BEAR MANAGEMENT PROGRAM
FINAL ENVIRONMENTAL IMPACT STATEMENT

SUMMARY

A need exists to review, refine, and update the black bear (Ursus americanus) management program so as to remain in keeping with the general management goals of the Montana Department of Fish, Wildlife, and Parks (FWP). Concerns raised both within FWP and from the public were used to shape the objectives for the program review. Because major changes in the management program for black bears are being considered, an environmental impact statement (EIS) has been completed in compliance with the Montana Environmental Policy Act.

FWP data, as formally cited in the FEIS, indicate the percentage of female bears in the annual harvest has been very near or above maximum levels documented by researchers as necessary for maintenance of a stable population. Providing more protection to the female segment of the population is one of the objectives of the management program review. Additional objectives include: improve monitoring data on population status, composition, and trend; improve quality and quantity of biological data; improve the flexibility of the regulation of annual harvest so as to be responsive to population trend data; and enhance public understanding of black bear biology, habitat requirements, and management.

Preceded by press releases a scoping document was released in July, 1993. After incorporation of initial public comment, a draft EIS was released in November, 1993 for further public review and comment.

Five alternative management approaches encompassing a total of 30 elements are included in the FEIS. Each element is a management strategy designed to resolve problems or meet objectives as determined by both FWP and the public.

Each alternative and its major impacts is summarized. You will note the alternatives vary considerably. Following the alternative summary is a brief description of each program element.

ALTERNATIVE 1 (Proposed Action)

The Proposed Action (Alternative 1) is comprised of 30 Elements (A - Z and I - IV). The emphasis of the Proposed Action is on assuring maintenance of desirable sex and age composition of Montana black bear populations through more conservative regulation of

annual hunting harvest. Implementation of the Proposed Action would require FWP to make decisions regarding program direction, procedures, and policy and to undertake a formal rule making process that includes provisions for public participation. It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

Impacts of Alternative 1 (Proposed Action)

Under this alternative, potential impacts to black bear populations would be expected to be minor in the short term, but significant in the long term. Conservative harvest of female bears and maintenance of a productive age structure are expected long-term impacts. The expected reduced incidence of orphaning would not significantly impact black bear populations but would contribute to a responsive management program. This alternative would be expected to significantly impact the ability of FWP to better assess and monitor population status and trend and to regulate annual hunting harvest.

Alternative 1 may significantly reduce the incidence of human/bear conflicts as well as the incidence of illegal activities.

Alternative 1 would not be expected to significantly impact grizzly bear populations. Impacts to bear related recreational opportunities, both hunting and nonhunting, would not be expected. Impacts on local economies would not be expected due to the Proposed Action.

Impacts to FWP revenues for support of the black bear management program would not be expected.

ALTERNATIVE 2 (Termination of Spring Hunting)

Alternative 2 consists of 26 Elements (B, C, D, E, F, G, H, K, L, M, N, O, Q - Z and I - IV). This alternative differs from the Proposed Action by the absence of Elements A, I, J, and P.

Under Alternative 2 all spring hunting of black bears would be eliminated (eliminating Elements A and J). The start of the fall hunting season would remain as it is now (first Saturday in September) rather than the proposed (Element I) mid-September opener. In the absence of a spring hunting season, Element P would be unnecessary because numbers of orphaned cubs delivered to the FWP shelter would be expected to decline to a level that could be accommodated by the existing facility.

Implementation of Alternative 2 would require FWP to make decisions regarding program direction, procedures, and policy and to undertake a formal rule making process that includes provisions for public participation. It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

Impacts of Alternative 2 (Termination of Spring Hunting)

As with the Proposed Action, conservative harvest of female bears and maintenance of a productive age structure would be expected long-term impacts. The expected reduced incidence of orphaning would not significantly impact black bear populations but would contribute to a responsive management program. This alternative would be expected to significantly impact the ability of FWP to better assess and monitor population status and trend and to regulate annual hunting harvest.

Alternative 2 may significantly increase the incidence of human/bear conflicts (nuisance bear and depredation complaints) as well as the incidence of illegal activities.

Alternative 2 would not be expected to significantly impact grizzly bear populations. Spring bear hunting opportunities would be eliminated but impacts to nonhunting recreation would not be expected. A loss of dollars generated in local communities during the current spring bear hunt would be expected particularly in some western Montana locations.

Impacts to FWP revenues for support of the black bear management program would not be expected.

ALTERNATIVE 3 (Spring Hunting Regulated by Quota)

Alternative 3 consists of 27 Elements (A, B, C, D, E, F, G, H, K, L, M, N, O, Q - Z and I - IV). This alternative differs from the Proposed Action by the absence of Elements I, J, and P.

The emphasis of Alternative 3 is protection of the female segment of the black bear populations through application of a harvest quota, which would include a female subquota, to the spring hunting season.

The start of the fall hunting season would remain as it is now (first Saturday in September rather than the proposed (Element I) mid-September opener. Under the spring female quota, it is presumed that the number of cubs orphaned and brought to the FWP shelter would be reduced to a level that the current facility could handle thus eliminating the justification for Element P.

Implementation of Alternative 3 would require FWP to make decisions regarding program direction, procedures, and policy and to undertake a formal rule making process that includes public participation. It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

Impact of Alternative 3 (Spring Hunting Regulated by Quota)

As with the Proposed Action, conservative harvest of female bears and maintenance of a productive age structure would be expected long-term impacts. Under certain conditions, however, broad application of harvest quotas could potentially result in less selective hunting harvest with regard to sex and reproductive status. The anticipated reduced incidence of orphaning would not significantly impact black bear populations but would contribute to a responsive management program. This alternative would be expected to significantly impact the ability of FWP to better assess and monitor population status and trend and to regulate annual hunting harvest.

Alternative 3 is designed to reduce the occurrence of human/bear conflicts as well as incidence of illegal activities. Whether a significant decrease in these areas of concern would occur or not is unknown.

Alternative 3 would not be expected to significantly impact grizzly bear populations. Impacts to bear related recreational opportunities, both hunting and nonhunting, would not be expected. Impacts on local economies would not be expected due to management under Alternative 3. Impacts to FWP revenues for support of the black bear management program would not be expected.

ALTERNATIVE 4 (No Hunting)

The No Hunting Alternative consists of 17 Elements (E, F, G, H, K, O, Q, R, S, T, W, X, Y, and I - IV). Alternative 4 differs from the Proposed Action by the absence of Elements A, B, C, D, I, J, L, M, N, P, U, V, and Z.

This alternative differs from the Proposed Action in that the hunting of black bears would be entirely eliminated. Implementation of Alternative 4 would require FWP to make decisions regarding program direction, procedures, and policy and to undertake a formal rule making process that includes public participation. It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

Impacts of Alternative 4 (No Hunting)

Lack of hunting harvest would be expected to result in potentially significant impacts to black bear populations in the long term. Lack of hunting harvest would be expected to result in significant changes in population dynamics, including changes in average age (expected to increase) and cub and subadult survival rates (expected decline). Lack of hunting harvest would significantly impact (reduce) the kinds and quantity of biological data available for use in population assessment and trend monitoring.

Alternative 4 could result in potentially significant impacts on the incidence of human/bear conflicts and on illegal activities (expected increase).

Alternative 4 would not be expected to significantly impact grizzly bear populations. However, some bear researchers have speculated that high density black bear populations could potentially suppress growth of grizzly bear populations as a result of competition between adult black bears and subadult grizzlies.

Hunting opportunities would be eliminated by this No Hunting Alternative. Nonhunting recreational activity may be increased under this alternative. Elimination of all black bear hunting would be expected to impact the economies of some communities but the degree of impact is unknown.

Alternative 4 would eliminate all monies generated from license revenues and would thus significantly impact (reduce) funding for the black bear management program.

ALTERNATIVE 5 (No Action)

The No Action Alternative consists of 7 Elements (A - G). It differs from the Proposed Action by the absence of Elements H through Z and I - IV.

The current hunting seasons and regulations would remain unchanged.

Implementation of this action would require no initiatives by FWP. The FWP Commission would continue routine review and decisions required during the biennial season setting process.

Impacts of Alternative 5 (No Action)

Alternative 5 would not be expected to result in impacts to black bear populations in the short-term, but long-term impacts could be significant. Following the current trend of increasing hunting pressure, mean age of harvested bears would be expected to decline.

Overharvest could occur, resulting in an eventual population declines. Impacts on the ability of FWP to assess and monitor population status and trend would not occur.

Alternative 5 would not be expected to impact the incidence of human/bear conflicts or illegal activities.

Alternative 5 would not be expected to significantly impact grizzly bear populations.

Alternative 5 would not be expected to impact hunting and nonhunting recreation in the short-term. Long-term bear hunting opportunities may decrease if potential population declines occur.

The No Action Alternative is not expected to significantly impact local economies in the short term or funding for the black bear management program. However, black bear population declines could result in long-term impacts to local economies as well as hunting license revenues.

Table 1. Element Description.

ELEMENTS	DESCRIPTION
	EXISTING
A	Hunting season format that includes both spring and fall hunting
B	Use of harvest quotas in some hunting districts
C	Use of ADC bear mortality data in population monitoring
D	Mandatory inspection of skulls of all harvested black bears
E	Prohibition on baits and hounds to pursue or harvest black bears
F	Assist beekeepers to implement preventative measures
G	Distribute information on bear biology and habitat requirements
	ADJUSTMENTS
H	Delineate new black bear management units
I	Adopt Sept. 15 as the earliest opening date for fall hunting
J	Adopt April 15 as the earliest opening date for spring hunting, and May 31 as the latest closing date
K	Inform the public about consequences of living in black bear habitat and how to prevent human/black bear conflicts
L	Expand emphasis on hunter ethics for both adults and youth
	NEW INITIATIVES
M	Management targets intended to maintain conservative harvest
N	Mandatory inspection and tagging of hides of harvested bears
O	Remove black bear license from the resident sportsman's package
P	Upgrade FWP shelter in Helena to better accommodate orphaned cubs
Q	Improved documentation/reporting system for illegal activities
R	Improved documentation of nuisance bear complaints and follow-up
S	Curtail chronic bear/human conflicts caused by human negligence
T	Improved handling of ADC data on depredation complaints and control actions
U	Require hunters to use meat of harvested black bears
V	Revise statute addressing waste of fish or game (87-3-102 MCA)
W	Revise statute addressing baiting (87-3-101 MCA)
X	Clarify statute addressing use of hounds by FWP, ADC or agricultural operators to control depredating bears (87-3-127 MCA)
Y	Work with other entities to develop black bear habitat criteria
Z	Produce an annual, standardized statewide black bear report
	PUBLIC INITIATIVES
I	Encourage ADC to assist only those bee keepers who use preventative measures to protect their hives
II	Maintain bear-proof garbage containers at FWP facilities and actively encourage other agencies and private interests to do the same
III	Explore the potential to initiate a research effort to evaluate management targets (outlined in Element M) and refine them if necessary.
IV	Explore the potential to initiate a research effort to provide needed information for use in developing habitat criteria (Y)

NEED, PURPOSE AND BENEFITS OF THE PROPOSED ACTION

The Montana Department of Fish, Wildlife and Parks (FWP) is charged by law with responsibility for protecting, preserving and perpetuating fish, game and furbearer populations as well as game and nongame bird populations within the state, using state funds collected for that purpose (Section 87-1-201, MCA (Montana Codes Annotated)). Management goals developed by FWP under the umbrella of its broad legal authority include:

- Manage with a focus on ecological systems to reflect the diversity of all wildlife and their habitats, while maintaining our commitment to Montana's hunting and fishing heritage.
- Provide increased opportunities for public enjoyment of fish, wildlife and parks resources while maintaining our commitment to improve landowner/sportsperson relations.
- Elevate the importance of public education and participation in all program areas to afford citizens the opportunity to better understand, appreciate and make informed decisions about our natural and cultural resources.

To achieve stated management goals, FWP proposes to update and refine the state's black bear management program. The objectives of the Proposed Action include: improving the amount and quality of biological data collected; improve our ability to accurately monitor population status, composition and trend; improve regulation of annual hunting harvest in response to changes in population trend; provide more effective protection for the female segment of black bear populations; and enhance public understanding of black bear biology, habitat requirements and management practices.

The ultimate benefit of the Proposed Action is long-term perpetuation of viable, healthy black bear populations that can provide aesthetic and recreational benefits to Montana citizens and visitors to our state, now and in the future.

The scope of this FEIS is limited to elements of the black bear management program for which either FWP, the FWP Commission, or the Montana Legislature has decision-making authority. The function of this FEIS is to disclose potential consequences of each of five alternative actions to the public, as well as to involve the public in making changes to the black bear management program.

DECISIONS TO BE MADE

Each alternative action is comprised of a number of individual program elements. Within each alternative, each proposed program element falls under the legal decision-making authority of one or more of the following decision-making bodies: 1) the FWP Commission, 2) the FWP, and 3) the Montana Legislature.

FWP Commission: Eight of the elements in the Proposed Action are subject to the authority of the FWP Commission, and can therefore be considered recommendations made by FWP to the FWP Commission. The FWP Commission is the policy making body that oversees the state's wildlife management programs. Section 87-1-301(1), Montana Codes Annotated (MCA) requires the Commission to "set policies for the protection, preservation, and propagation of the wildlife, fish, game, furbearers, waterfowl, nongame species, and endangered species of the state for the fulfillment of all other responsibilities of the Department as provided by law." Recommendations that the FWP Commission chooses to adopt would be in the form of hunting regulations, which would be adopted following a public hearing during the biennial season-setting process, and would become effective for the 1994 black bear hunting season. The Montana Fish, Wildlife and Parks Commission adopts hunting seasons either annually or biennially under an exception to the Administrative Procedure Act for agency rules (Section 2-4-102(10)(d), MCA).

FWP: Elements subject to FWP authority can be implemented upon a change in department policy and/or a change in Administrative Rules of Montana (ARM). ARM rules can be adopted by FWP following a formal rule making process that includes public notification and an opportunity for public review and input.

Montana Legislature: Decisions subject to legislative authority would require the FWP to draft legislation that would be subject to consideration and a vote by the Montana Legislature.

RESULTS OF PUBLIC SCOPING

A public scoping process was conducted during July and August, 1993. A scoping document outlining a draft of the Proposed Action and soliciting public input on issues and alternatives was mailed to over 500 individuals and organizations in July. It was also made available upon request (via press releases) to the general public. A total of 143 comments were received by FWP through August 30, 1993. Most comments were received from individuals, although a third of the respondents commented on behalf of organizations.

ISSUES SCOPING

Comments received during the public scoping process addressed 29 issues.

ISSUES EVALUATED IN THE DEIS

Issues addressed by one or more alternatives:

1) Orphaning of dependent young
2) Vulnerability of black bears, particularly females, to hunting harvest
3) Potential for mistaken identity (grizzly bears misidentified by hunters as black bears)
4) Potential for overharvest, particularly of the female population segment
5) Need for public information/education programs
6) Hunter ethics
7) Human health concerns associated with consumption of black bear meat
8) Nonlethal means of addressing depredation and nuisance bear problems
9) Hunting: its roles and its effects.

1) Orphaning of dependent young:

Although it is illegal to kill a female accompanied by cubs (Black Bear Hunting Regulations, Appendix 1), the potential for accidental or illegal harvest of lactating females will always exist, particularly during a spring hunting season. The majority of the 10 to 15 black bear cubs placed at the FWP animal shelter in Helena annually, are assumed to have been orphaned during the spring hunting season (Yannone, pers. comm.).

Brown (1990) estimated potential harvest of lactating sows in northwest Montana (Region 1) in the absence of a prohibition on harvest of sows with cubs. Knowing that sows with cubs comprise 10% of the black bear population in Region 1 and that females do not reproduce until 5 or 6 years of age; and that 33% of reproductive age females in the population have cubs in a given year, Brown calculated that it would be possible for 18-25 lactating females to be harvested in Region 1. This worst case scenario would result in removal of a female bear with cubs for every 442-614 square miles of bear habitat. He also concluded that removal of this number of productive sows, and their cubs, would not significantly impact the black bear population in northwest Montana. Because it is illegal to kill a female accompanied by cubs, actual loss of reproductive females is thought to be much lower than this worst case scenario.

The issue of orphaning is founded primarily in ethical concerns, rather than concern about impacts to population trend. This concern is addressed by Element L (refer to

Tables 1 and 2 on page 17) which is designed to improve hunter education and hunter ethics.

Alternative 2 addresses the orphaning issue through elimination of spring black bear hunting entirely. Alternative 3 provides for use of a harvest quota, which could include a female subquota, during the spring season, to limit harvest of female bears, including those with dependent young. Alternative 4 would eliminate black bear hunting altogether. Element P addresses provisions for orphaned young to be cared for and reintroduced into the wild. Elements E, J and V are also intended to afford protection to adult females, including those with dependent young.

2) Vulnerability of black bears, particularly females, to hunting harvest:

Public comments addressing vulnerability were not in opposition to hunting harvest, but revolved around when (time of year) and how (under what conditions) bear populations should be hunted, in light of the difficulties of distinguishing females from males. There is concern that black bears are particularly vulnerable immediately following emergence from their dens, a period when food is scarce and bears are still in a semi-hibernation state, and during the first part of September when bears are maximizing use of berry patches. Public concern about bear vulnerability during these times of the year is corroborated by peak harvest periods evident under the existing hunting season format (Appendix 2 Figs. 8-11). Alternative 2 addresses the spring vulnerability issue through total elimination of spring bear hunting. Alternative 3 addresses the issue through application of harvest quotas during the spring season. Spring vulnerability of females is also addressed by Element J. Fall vulnerability is addressed by Element I. Elements B, E, H, L, M, O, and V also address vulnerability issues.

3) Potential for mistaken identity (grizzly bears misidentified by hunters as black bears):

This issue is borne out of 1) concern for protection and recovery of the state's grizzly bear populations and 2) the belief that provisions for grizzly bear protection are essential to maintaining black bear hunting seasons in the long term. Alternative 2 (No Spring Hunting) and 4 (No Hunting) provide protection for grizzly bears by eliminating or curtailing hunting of black bears, Elements E and L are preventative measures that provide protection to individual grizzly bears.

4) Potential for overharvest, particularly of the female population segment:

Concern for protecting the female segment of black bear populations is borne out of concern for 1) The effect of hunting harvest on black bear productivity and population levels, 2) Minimizing the incidence of orphaning and 3) Enhancing the credibility of the state's black bear management program, particularly among anti-hunting interests. This

concern is addressed by the Proposed Action, specifically Elements B, C, D, E, H, I, J, M, N, O, V, W and X, which are specifically designed to provide for regulation of hunting harvest in a manner potentially more sensitive to black bear population trends.

5) Need for public information/education programs:

A number of participants highlighted the issue of public information and education as the most important aspect of a black bear management program. Suggested objectives for such programs included: 1) public awareness of black bear biology and habitat needs; 2) public understanding of the ramifications of living in black bear habitat; 3) public knowledge of preventative measures people should practice to help avoid occurrence of human/black bear conflicts; and, 4) the necessity of hunters to be knowledgeable about distinguishing between male bears and females with cubs. These concerns are addressed by Elements G, K, S and O.

6) Hunter ethics:

Participants in the scoping process identified a need for improved hunter ethics - for the ultimate benefit of black bear populations as well as perpetuation of traditional sport hunting in the long-term. This issue is addressed by Elements L, Q and W.

7) Human health concerns associated with consumption of black bear meat:

Some participants expressed concern about potential exposure to trichinosis as a result of consuming meat of harvested black bears. Element U, which is included in 3 of the 4 alternatives, addresses this issue.

8) Nonlethal means of addressing depredation and nuisance bear problems:

Some participants expressed the desire for nonlethal measures - rather than control actions -to be used to address depredation and nuisance bear complaints. This issue is addressed by Element R, which is included in 4 of the 5 alternatives.

9) Hunting: its role and its effects:

Hunting is perceived by various segments of the public as: 1) a necessary population management tool and/or 2) an important form of recreation, or 3) an unnecessary, unethical exploitation of wildlife. Four of the five alternatives include hunting harvest as a primary management tool. Application and regulation of hunting differs among alternatives 1, 2, 3 and 5. Alternative 4 excludes hunting harvest from the management program. The portion of the public supportive of hunting has expressed desire that the state have a credible management program with provisions for: 1) obtaining accurate

information on population status and trend; 2) providing public information and education programs; and, 3) providing good hunter education, including hunter ethics. Elements of the various alternatives that effectively address direct criticism by anti-hunting interests include E, F, L, N and U.

ISSUES ANALYZED IN THE DEIS

1) How will the action affect black bear populations? (population level and female segment)
2) How will the action affect black bear habitat?
3) How will the action affect hunting opportunity?
4) How will the action affect nonconsumptive recreational opportunity?
5) How will the action affect the ability of FWP to effectively regulate hunting harvest?
6) How will the action affect the ability of FWP to accurately assess and monitor population status and trend?
7) How will the action affect illegal activities?
8) How will the action affect the economy of local communities?
9) How will the action affect funding for the state's black bear management program?
10) How will the action affect the incidence of human/black bear conflicts (depredation, nuisance bears, chronic problem areas, damage to young trees).
11) How will the action affect grizzly bear populations?

ISSUES NOT EVALUATED IN THE DEIS

The following issues are either 1) not significantly affected by the alternatives, or 2) not within the scope of the decisions to be made. Therefore, they are not analyzed further in the DEIS. The rationale for excluding them from detailed analysis is presented.

1) Black bear predation on elk calves and deer fawns

Black bear predation on elk and moose calves and deer fawns does occur and has been documented to be a significant cause of neonatal mortality in several local geographic areas of Idaho and Alaska (Schlegal 1976, Franzmann et al. 1980, Crete and Jolicoeur 1987). However, productivity of ungulate populations here in Montana do not indicate that black bear predation occurs at a scale that would impact ungulate populations. This issue is excluded from further examination because lack of scientific data precludes analysis.

2) Preference for state, rather than federal authority for management of grizzly bears, and proposed inclusion of grizzly bear management issues in this DFEIS.

By virtue of its federal classification as a threatened species in the 48 conterminous states, grizzly bears automatically fall under the management authority of the USFWS, U.S. Department of Interior under provisions of the Endangered Species Act of 1973. FWP has cooperated with the USFWS in development of a recovery plan for the grizzly bear in Montana. Once population goals outlined in the recovery plan have been achieved, the grizzly bear should eventually be removed from the endangered species list and management of the species returned to the state of Montana. This issue is beyond the scope of this environmental analysis. Grizzly bear management issues were examined in a Final Programmatic EIS published in 1986 (Dood et al. 1986) and a five year update to the grizzly bear EIS (Dood and Pac 1993).

3) Effects of wolf reintroduction on black bear hunting

This issue is beyond the scope of this environmental analysis. Wolf reintroduction issues are examined in a draft EIS recently released by the USFWS (U.S. Fish and Wildlife Service 1993).

4) Relationship between the Proposed Action and the Rocky Mountain Front Guidelines

The Rocky Mountain Front Guidelines were cooperatively developed by FWP, U.S. Fish and Wildlife Service, Bureau of Land Management, the Nature Conservancy, Montana State University, Milestone Petroleum, Inc. and Arco Oil and Gas Co. Management guidelines developed for several species inhabiting the Rocky Mountain Front were designed to avoid or minimize potential conflicts between human activities and wildlife, with emphasis on potential impacts of oil and gas exploration. Guidelines specific to black bears were not presented. Guidelines developed for grizzly bears did not incorporate recreational activities such as hunting, but are oriented instead toward seismic activities, exploratory drilling schedules, pipeline construction, helicopter flight corridors and location of field operation centers. The Rocky Mountain Front Guidelines were consulted, but since they are not designed to address recreational human activity, FWP believes this issue to be unrelated to decisions to be made.

5) Whether archery hunting of black bears is appropriate

Criticism of archery hunting of black bears is based on concern about humaneness - including the potential for wounding. On the other side of the issue, archers maintain that an arrow is just as effective as a bullet and that the shorter shooting range required by an archery hunter minimizes potential accidental harvest of females with dependent young or grizzly bears. There currently is no special archery season in Montana. Hunters who wish to hunt black bears with archery equipment may exercise their choice of hunting weapon during the general black bear season. Approximately 5% of black bear hunters hunt with archery equipment. In 1992, 635 archery hunters harvested 34

black bears in Montana (5% success rate). In 1991, 994 archery hunters harvested 109 black bears in Montana (11% success rate) (Appendix 3).

Studies of the effectiveness of archery hunting and the incidence of wounding have addressed ungulates - primarily deer - but not bears. A recent FWP report to the Fifty-first Montana Legislature, "Effects of Archery Hunting on Elk Management in Montana" (Wildlife Division 1989) summarized mortality rates of 535 radio-collared elk over a 6-year period. During that 6-year period, 4 elk were wounded by bow hunters. While this report may have limited applicability to the issue of archery hunting of black bears, it did conclude that concerns about the effects of archery hunting on elk populations appeared to be a matter of perception and social preference rather than a biological problem (Wildlife Division 1989).

In response to increasing popularity and participation in archery hunting, as well as public concern about humaneness, the Montana Bow Hunters Association supported legislation that required youths 12 through 17 years of age to take a Bow Hunter Education Course, in addition to the existing Hunter Education course, prior to obtaining a Montana archery license. This requirement became effective in March, 1988. This legislation also earmarked $1 from every archery license purchased to fund implementation of the Bow Hunter Education Course, which was developed by the National Bow Hunter Education Foundation. The program is administered by FWP. In 1991, the Montana Bow Hunters Association supported an amendment to the 1987 law that also requires first-time adult bow hunters to complete the Bow Hunter Education course, prior to obtaining a Montana archery license. This initiative provided a means to address both proficiency and ethics of bow hunters.

The 1991 legislature enacted a law that gives the FWP Commission authority to restrict use of certain types of archery equipment. Under this authority, the FWP Commission has adopted regulations to reduce the likelihood of wounding, including prohibition of equipment useable during illegal shooting hours (including laser sights usable at night) and other types of equipment considered unethical (including chemical and explosive pods). The above initiatives, combined with lack of evidence that archery hunting of black bears in Montana or any other state or province is inhumane are the reasons that FWP has decided not to pursue this issue further at this time.

6) Motorized public access

FWP does not have management authority for specific regulations addressing motorized access on public and private lands. None of the alternatives analyzed in this DFEIS are expected to result in changes in regulation of motorized access on public lands or on FWP lands. FWP consultations and recommendations solicited by public land

managment agencies concerning motorized access would reflect the alternative chosen by FWP.

7) How will the action affect development of other resources?

Development of other resources (logging, grazing, mining, etc.) on public and private lands is not within the management authority of FWP and will occur independently of the alternatives considered in this draft EIS. FWP consultations and recommendations solicited by public land management agencies concerning proposed developments would reflect the alternative chosen by FWP.

8) Who should pay for education efforts?

Education programs, for hunters as well as the general public, are considered integral to the state's wildlife management program. As such, they have been, and will continue to be funded by license dollars and federal PR (Pittman-Robinson) funds, regardless of which alternative is implemented. Therefore, this issue is immaterial to decisions to be made.

9) Should FWP actively improve black bear viewing and photography opportunities?

A number of participants in the public scoping process suggested that FWP formally recognize the importance of nonconsumptive black bear recreation by collaborating with land management agencies on habitat enhancement projects that could improve bear viewing and photography opportunities at certain sites. FWP acknowledges the growing demand and importance of nonconsumptive wildlife-related recreation and intends to continue to assure that black bear populations are maintained at levels that will ensure availability of such opportunities, which are probably most readily available in the fall when bears are maximizing use of berry crops. However, FWP believes that bears do not lend themselves to establishment of formal viewing sites (such as those established on big game winter ranges and raptor congregation sites) by virtue of potential threats to human safety, liability issues and the potential for black bears to become habituated to humans. Habituation of bears to humans has predicable results, all of which are detrimental to bears. Habituated bears are more likely to become "nuisance" bears, seeking out unnatural food sources in the vicinity of homes and/or camp sites. Such bears are also rendered more vulnerable during hunting season. For the foregoing reasons, this approach to nonconsumptive recreation is not considered further.

ALTERNATIVES SCOPING

Ten alternatives were identified during the public scoping process. Alternatives considered but not analyzed further in the DEIS include the following:

1) Prohibit all black bear hunting in grizzly bear habitat

The current distribution of grizzly bears overlaps with that of the state's most productive black bear populations in western Montana. Distribution of grizzly bears is expected to continue to expand as recovery of the species progresses and grizzlies expand into formerly occupied habitats. Prohibition of black bear hunting in grizzly bear habitats would render much, if not most, most of western Montana off-limits to black bear hunting. Transfer of hunting pressure from productive black bear populations in western Montana to remaining, less productive black bear populations in central Montana would necessitate very strict requirements of hunting harvest, possible through use of quotas and/or permits (similar to Alternative 3). Reduced need for hunting harvest as a management tool could result in near or total elimination of black bear hunting in remaining black bear habitat (similar to Alternative 4).

The practicality of this suggested alternative is limited by the fact that grizzly distribution will continue to be dynamic as recovery of the state's grizzly populations progresses, as well as the problems of clearly delineating and defining black bear habitats outside the distribution of grizzly bears. The logistics of effectively applying and enforcing such a regulation would also be a problem.

In lieu of this type of approach, FWP has instituted several information/education measures designed to address the issue of mistaken identity. Measures already in place include: 1) a map of grizzly bear distribution in Montana published in the black bear hunting regulations (Appendix 1); 2) "Know Your Bear" brochures, wallet cards and an adhesive sticker distributed to black bear hunters and the general public (Appendix 4); 3) a black bear/grizzly bear identification slide series compiled by Montana bear researchers and available in every regional office. This slide series is routinely presented to hunter education classes, sportsman clubs, youth groups and civic groups; and 4) A feature article in Montana Outdoors on black bear/grizzly bear identification (Kasworm 1987).

Grizzly bear mortality data are summarized in FWP annual reports (Greer 1971-1985, Palmisciano 1986, Dood and Pac 1988, Pac and Dood 1989 and 1990). During the period 1975-1991, 15 grizzly bear mortalities attributed to accidental killing by black bear hunters have been recorded in Montana (Dood and Pac 1993). Ten cases of mistaken identity occurred in May during spring black bear season and two in September during the fall season. This source of mortality was not deemed biologically significant (Dood and Pac 1993). Wyoming recorded 10 grizzly mortalities in this category since 1972 (Roop pers. comm. in Dood et al 1985), with four occurring in 1982 over baits. Wyoming banned black bear baiting in grizzly habitat in 1982 and Idaho imposed a similar ban in 1983.

Records kept on grizzly mortality in the northern continental divide (NCD) and Cabinet-Yaak ecosystems (Appendix 5) indicate that the current multi-faceted education approach is working satisfactorily. This, and the belief that effective implementation of this alternative is not feasible, led to the decision not to evaluate this alternative further.

2) Allow use of bait to harvest black bears

The current prohibition on use of bait is the result of strong public sentiment against this practice, which was reaffirmed during the public scoping process. The existing prohibition on baiting has endured challenge and debate during several legislative sessions. This suggested alternative is not considered further because it constitutes an illegal activity.

3) Allow use of dogs to hunt black bear

The current prohibition on use of dogs to hunt bears is the result of strong public sentiment against the practice, which was reaffirmed during the public scoping process. Like the baiting issue, the existing prohibition on use of dogs to harvest or pursue bears has weathered challenge and debate during several legislative sessions. This suggested alternative is not considered further because it constitutes an illegal activity.

4) Implement a chase-only season to allow people to pursue black bears with dogs

The current prohibition on use of dogs to pursue bears is the result of strong public sentiment against the practice, which was reaffirmed during the public scoping process. This suggested alternative is not considered further because it constitutes an illegal activity.

5) Allow volunteer houndsmen to respond to black bear depredation problems, rather than FWP or Animal Damage Control (ADC, U.S. Department of Agriculture).

FWP and ADC responsibilities are specified in statute. There are no provisions for state agencies to transfer responsibilities delegated to them by law, to private parties. In addition to the legal barriers to this type of arrangement, it would create the appearance of conflict of interest as well as the potential for abuse. This suggested alternative is not considered further because it could constitute an illegal activity.

6) Allow black bear hunters to carry out control actions, rather than FWP or ADC

The reasons outlined above apply. An additional consideration is the fact that control actions often take place in proximity to dwellings and livestock, and may involve situations where human safety is at risk. This increases the desirability for necessary

control actions to be accomplished by professionals who are experienced at carrying out control actions under difficult circumstances. These considerations, and associated liability issues render this suggested alternative unfeasible.

7) Close more roads and ban use of mountain bikes on closed roads to reduce vulnerability of black bears to hunting harvest, rather than shorten the black bear hunting season.

FWP does not have authority over public access to public or private lands, or regulations that govern conditions of public access. In addition, such regulations, even if they were to be implemented by public and private land managers, do not address harvest of female bears, which is central to the purpose and need of the Proposed Action. For those reasons, this proposal is not considered a viable alternative.

ALTERNATIVES CHOSEN FOR ANALYSIS IN THIS FEIS:

1 Proposed Action
2 Termination of spring black bear hunting
3 Use of quotas to regulate spring black bear harvest
4 Termination of all black bear hunting
5 No Action (continuation of the existing black bear management program).

The three alternatives chosen for analysis in the DEIS (2, 3 and 4), combined with the Proposed Action (1) and the No Action (5) alternatives, encompass the concerns raised during public scoping. Together, these alternatives encompass concerns and ideas that were offered during the public scoping process.

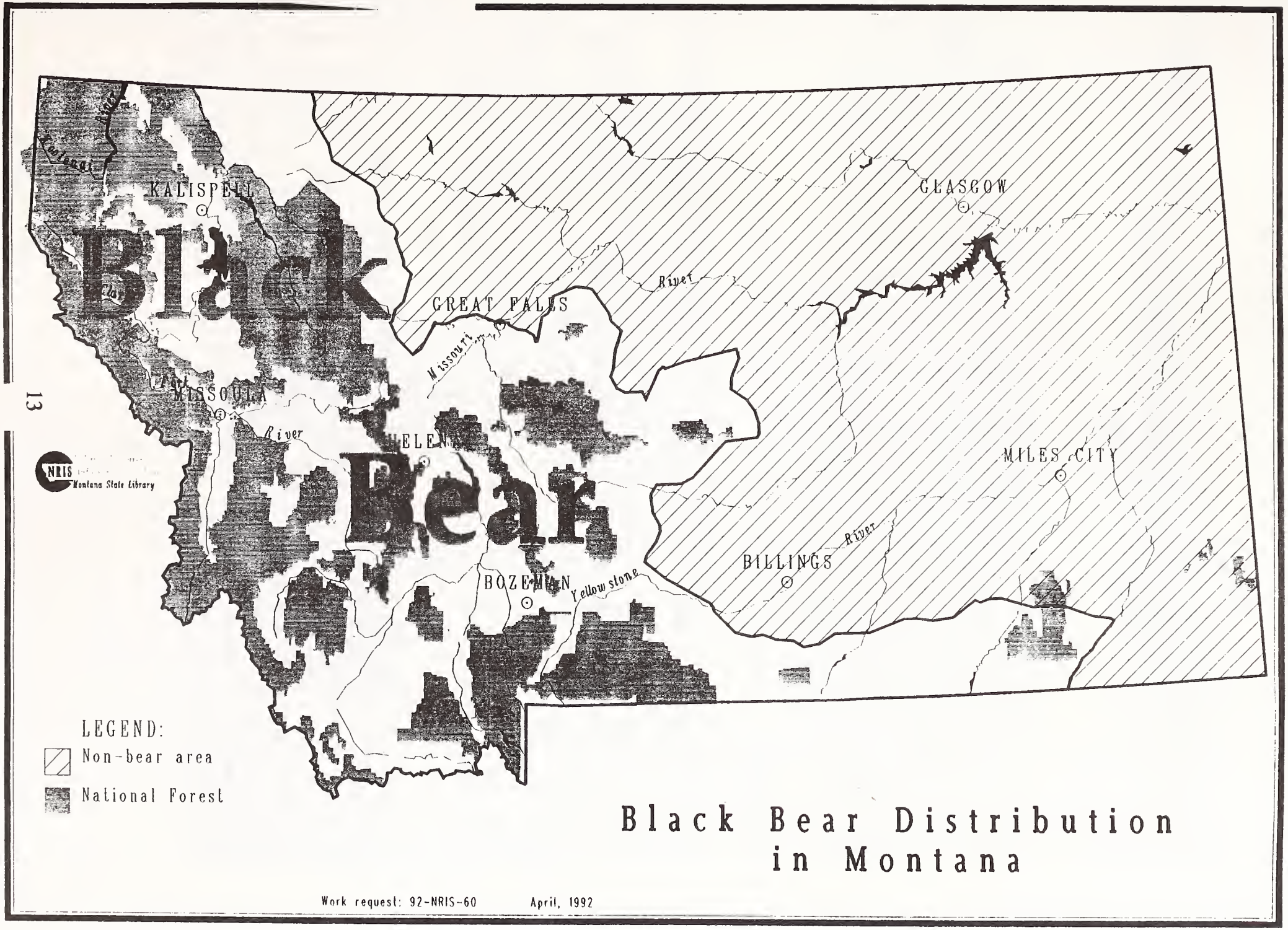
AFFECTED ENVIRONMENT

PHYSICAL

The alternative that is ultimately adopted will be applied over all black bear habitats in Montana, comprising the western 2/3 of the state (Figure 1). The Proposed Action, or one of the other 4 alternatives, will set the course for the state's black bear management program and will be implemented in the form of statewide laws, administrative rules, policies and procedures. Regardless of which alternative is implemented, impacts to the physical environment are not expected to occur.

During the public scoping process, concerns about the physical environment emphasized on-going conversion of black bear habitats to rural subdivisions and other human uses. FWP acknowledges that continued movement to, and development of rural areas will

Figure 1. Black Bear Distribution in Montana.



result in loss of black bear habitat, independent of the alternatives considered in this DEIS. The alternatives considered in this environmental analysis will directly affect the state's black bear populations, in terms of total numbers and population dynamics, including age and sex composition.

Appearance:

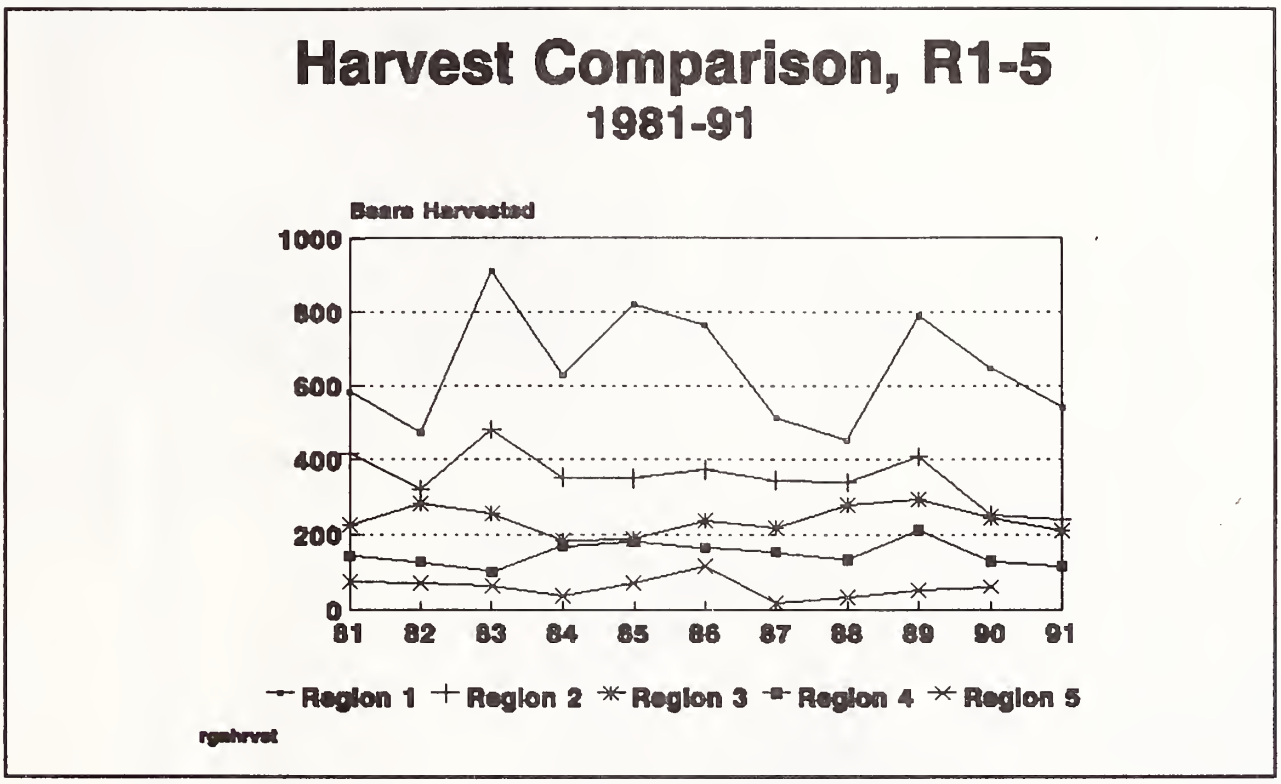
Adult North American black bears (Ursus americanus) are typically 4 1/2 to 5 1/2 feet long, 24 to 40 inches high at the shoulder, and 150-300 pounds in weight. In eastern North America habitats featuring a highly nutritious diet, adult males may attain a weight of 500 pounds or more. Females are generally about 20% smaller than males (Cahalane 1961). Coloration varies geographically. Nearly all bears in eastern North America are black, but in the western portion of the continent coat color ranges from black to blond, with varying amounts of white on the chest. The snout is usually brown. In Montana, 50% of harvested bears are black, 30% are black-brown or dark brown and 20% are shades of light brown, including blonde (Greer and Craig 1970).

Distribution:

Across North America, black bear habitat can be characterized as forestlands that provide suitable food (Bray and Barnes 1967). Distribution of black bears in Montana has probably not changed during the past several decades. Black bears occupy forested habitats on both sides of the continental divide, the moist forests of the northwest corner of the state considered to be the most productive black bear habitat. From the northwest to the south and east, habitat quality and bear densities decline coincident with the precipitation gradient. Approximately 45% of the state is considered occupied black bear habitat (Figure 1). Although black bears are seen occasionally in Regions 6 and 7, the eastern part of the state is not considered occupied black bear habitat. Habitat quality, bear densities and annual bear harvest (Figure 2) are highest in Administrative Region 1 and lowest in Region 5 (Figure 3).

Distribution of grizzly bears in Montana does overlap with that of black bears (Figure 4). Herrero (1978, 1979) noted that although the two species are capable of coexisting in some forest ecosystems, the grizzly is better adapted to exploit more open habitats by virtue of its larger body size and more aggressive nature. Several studies in northern and northwest Montana affirmed that grizzlies predominated in open shrub and burn areas (Jonkel and Cowan 1971, Shaffer 1971, Martinka 1972, Kasworm 1983). Data from the Rocky Mountain Front suggests a negative density relationship between grizzly bears and black bears (Aune and Kasworm 1989). Competition between the two species for space

Figure 2.


Harvest Comparison, R1-5
1981-91
Bears Harvested
1000
800
600
400
200
0
81
82
83
84
85
86
87
88
89
90
91
Region 1
Region 2
Region 3
Region 4
Region 5
rgnhrvst

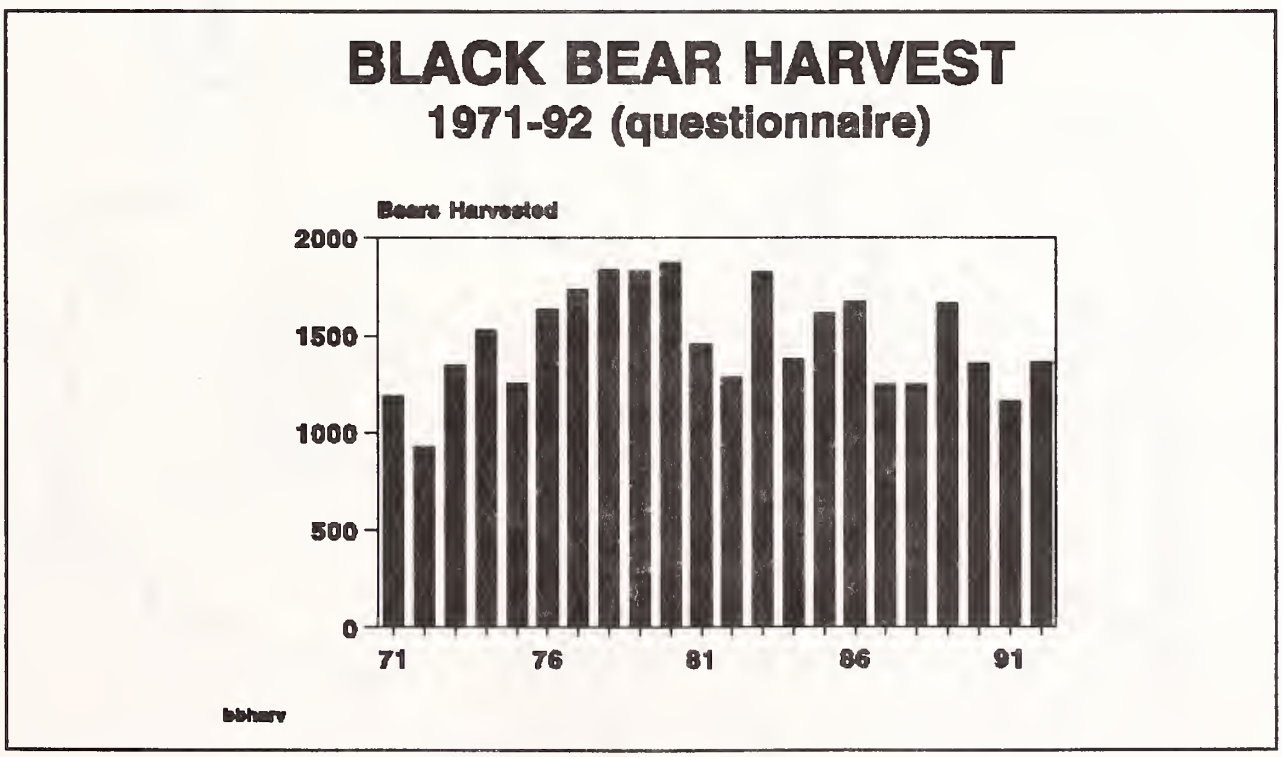
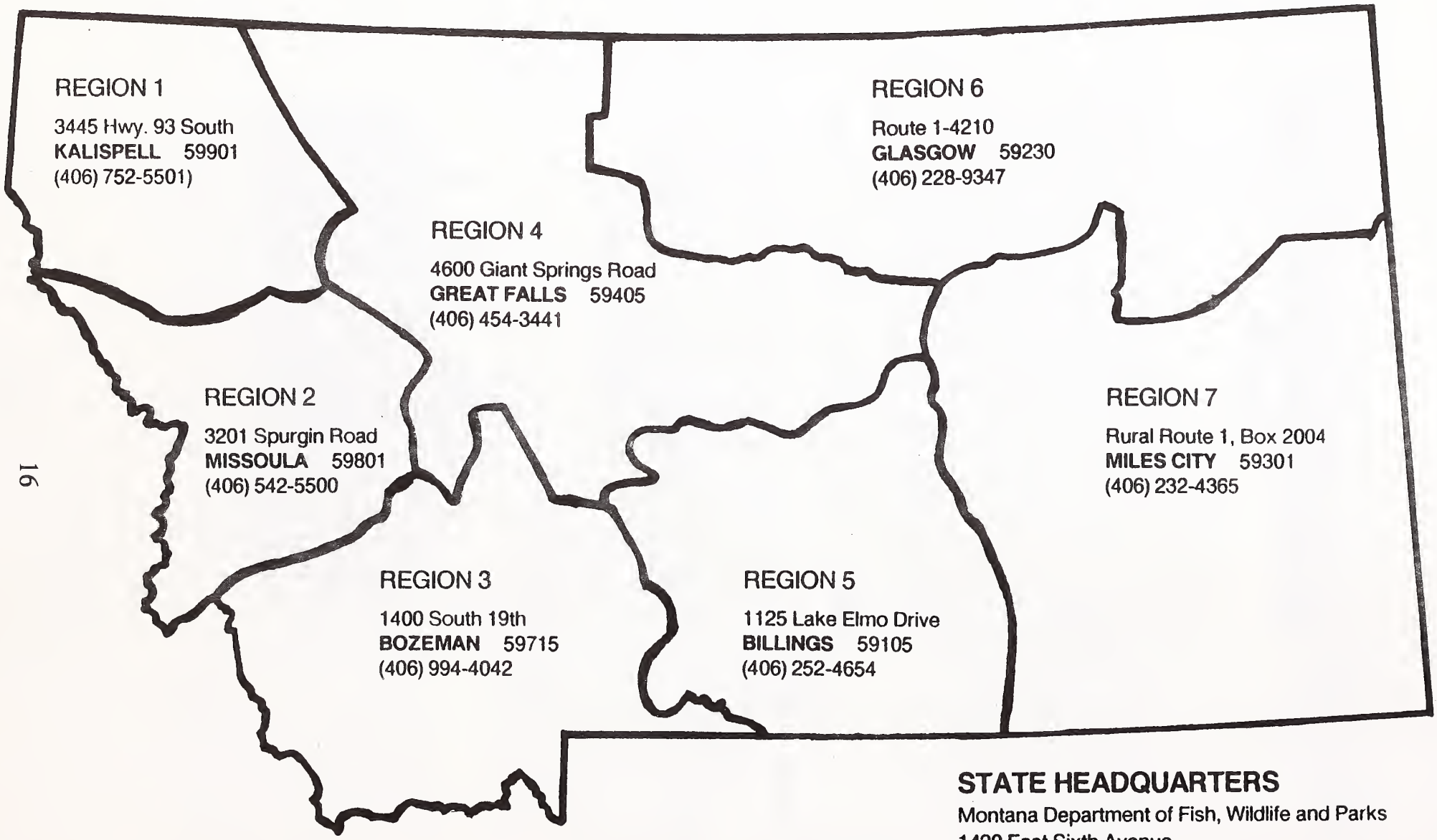

BLACK BEAR HARVEST
1971-92 (questionnaire)
Bears Harvested
2000
1500
1000
500
0
71
76
81
86
91
bbharv

Figure 3. Fish, Wildlife and Parks Administrative Regions.



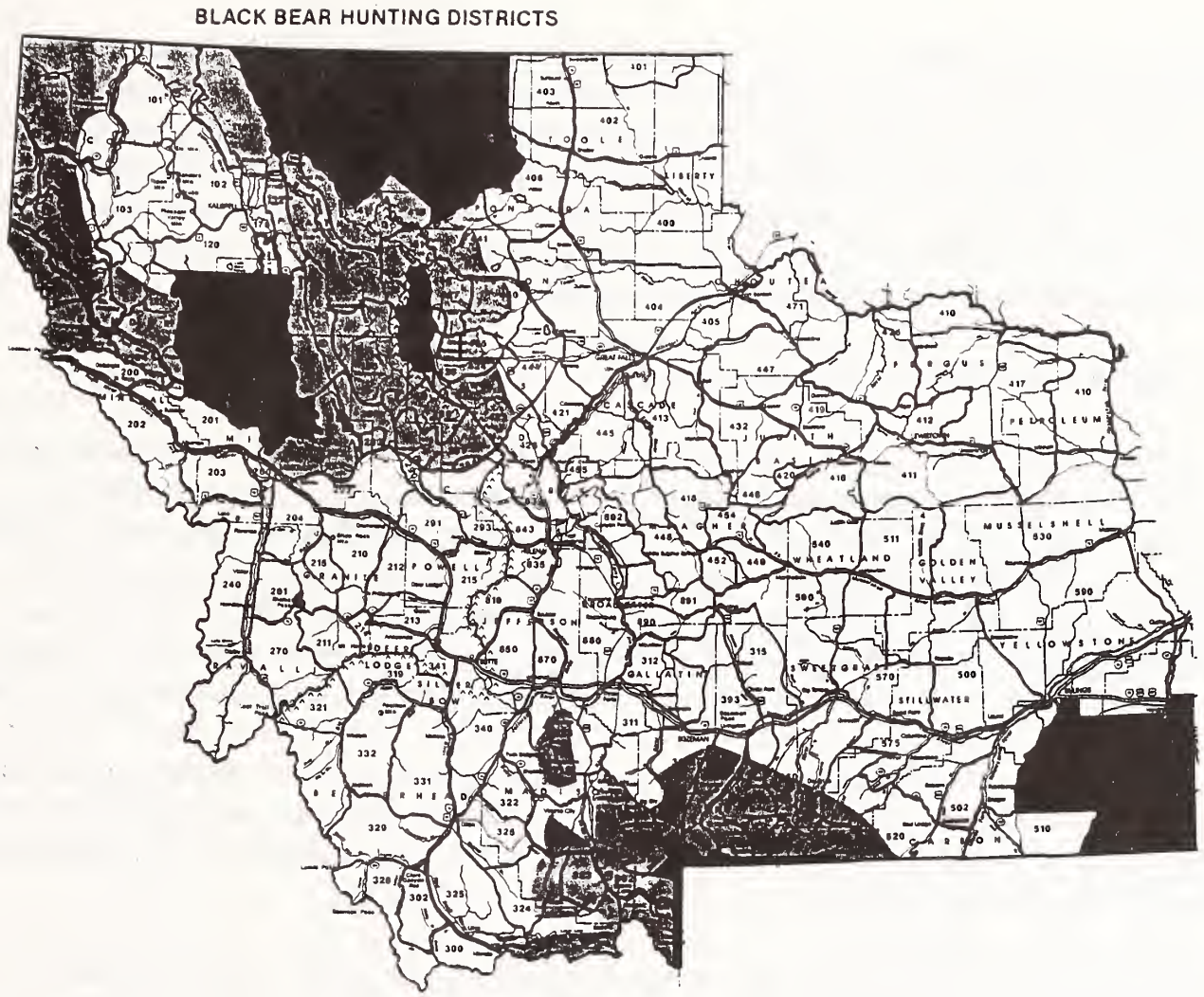


Figure 4. Map of grizzly bear distribution (light shading) in hunting districts open to black bear hunting. Black areas designate national parks and Indian reservations. National parks are closed to all hunting and Indian reservations are closed to hunting of big game, including black bears, under state regulations.

may be of greater importance than competition for food (Rogers 1983, Aune and Kasworm 1989, Kasworm and Thier 1991). Interspecific conflict may prevent black bears from making significant inroads in areas with flourishing grizzly populations, but black bear densities may increase if the grizzly population is suppressed by some other factor, most notably human activity (IGBC 1987). Jonkel (1984) suggested that in areas of high black bear densities, expansion of grizzly populations may be suppressed as a result of competitive exclusion of subadult grizzlies.

Life History and Habitat Requirements:

Black bears lead solitary lives, except for the brief period that a male and female spend together during the breeding season and the period that cubs are in the care of their mother (1 1/2 to 2 1/2 years). Black bears breed during the months May, June and July. Pregnancy lasts about 220 days. However, the fertilized egg is not implanted in the uterus until late fall and embryonic growth occurs only during the 10 weeks prior to birth. Cubs are born in the winter den during late January or early February, weighing 6-9 ounces. They are weaned at 6-8 months of age but remain with their mother for at least 1.5 years (Jonkel and Cowan 1971) and may remain with the sow for 2 1/2 years (Rogers, 1977). Subadult black bears generally disperse from their maternal home ranges as yearlings, males ranging further than females. Female offspring are more likely than males to reside closer to or within their maternal home ranges (Powell 1987, Elowe and Dodge 1989, Mattson 1990).

Although Montana black bears may breed at 4 1/2 to 6 1/2 years of age, they have not been observed to successfully produce cubs until age 6 or 7 (Thier 1990, Jonkel and Cowan 1971). In contrast, black bears inhabiting more productive habitats in the eastern U.S. grow more quickly and mature earlier, successfully reproducing at age 2 1/2 to 3 1/2. Adult females in eastern North America breed every 2 years, but in the west, a breeding interval of 3 or more years is more common (Bunnel and Tait 1981). Research in Montana indicates an interval of at least 3 years between litters (Simmons and Stewart 1989, Jonkel and Cowan 1971, Kasworm and Manley 1988). Litter size is correlated with body size, with older, larger females producing larger litters (Alt 1982). Average litter size reported for several Montana black bear populations was 1.6 (Jonkel and Cowan 1971, Brown 1992), 1.7 (Kasworm and Thier 1991), 1.68 (Simmons and Stewart 1989) and 1.8 (Aune et al. 1984).

Black bears are opportunistic omnivores, consuming both vegetation and meat. Intake of animal matter includes scavenging remains of dead animals. Their unspecialized, relatively inefficient digestive system necessitates that they maximize the quality of the food items they ingest. Black bears seek out food items that provide starch, sugar, animal and plant protein and animal and plant fats (Herrero 1978, Schwartz and Franzmann 1991).

The majority of a black bear's diet consists of plant material. Plant material comprises 75% of the year-long diet in Yosemite National Park (Graber and White 1983), 80% in the Great Smoky Mountains National Park (Eagle and Pelton 1983), 77% in Wyoming (Irwin and Hammond 1985) and 90% in Glacier National Park (Kendall 1986). Less than 2% of the diet of black bears in Idaho consisted of animal matter (Beecham and Zager 1992). In Wyoming and Montana studies, grasses, sedges and forbs were the principle food items consumed during spring and early summer. Nuts (including those from whitebark pine and limber pine) and berries (especially huckleberries) predominated in late summer and fall (Shaffer 1971, Martin 1983, Irwin and Hammond 1985, Kendall 1983 and 1986, Mack 1986, Greer 1987 and Aune and Kasworm 1989). Insects, especially ants, and carrion were the principle non-plant foods consumed. Plants providing food for Montana black bear populations include common dandelion, goatsbeard, common horsetail, cow parsnip, angelica, sweetvetch, chokecherry, gooseberry, hawthorn, grouse whortleberry, huckleberry, mountain ash and serviceberry (Mack 1986, Kendall 1986). Important non-forested habitats used by black bears in their search for food include wet meadows, riparian areas, avalanche chutes, roadsides, burns, sidehill parks and subalpine ridgetops.

Black bear movements and home range size reflect the patchy, scattered nature of important food sources including mast crops (fruit of trees and shrubs, including nuts, acorns and berries). Unlike other species that defend a particular geographic area, bears move in response to the availability of food and may actually congregate at seasonally important food sources. Therefore, home ranges overlap and vary substantially season to season, and year to year. Home range size for marked black bears in Montana have varied between 53 and 225 square miles for males and 14 to 137 square miles for females (Kasworm and Thier 1991, Thier 1990, Aune and Brannon 1987, Greer 1987). Home range size is larger in the comparatively arid Rocky Mountain Front than in the forested NW corner of the state. Black bear densities have been estimated in various areas of NW Montana as 0.17 per square mile (Thier 1990), 0.59 - 0.8 per square mile (Jonkel and Cowan 1971), and 0.56 per square mile (Mace 1993).

The highest quality black bear foods are typically products of lush vegetative habitats, often productive riparian lands (Schoen 1990), a factor contributing to conflicts with humans and other land uses. Given their inquisitive nature, opportunistic food habits and natural role as a scavenger, it is no surprise that black bears will consume and readily become habituated to garbage, pet foods, fruit trees, and other food sources associated with human habitation.

Hibernation, an adaptation to northern latitudes, reduces energy requirements during winter months when food is inadequate or unavailable due to snow cover. Physiological changes occur in the fall as food supplies diminish and air temperature declines. Even before entering the den, a bear's heart rate declines from 40-50 beats to 8-10 beats per

minute. But unlike classic hibernators, body temperature does not decline dramatically. Black bears remain fully arousable throughout hibernation. No one fully understands the unique physiological mechanisms that allow bears to survive as long as 6 months without food or water, and without urinating or defecating. It is thought that bears are able to switch from protein metabolism to lipid (fat) metabolism during the period of hibernation. Fat, rather than muscle tissue, accounts for the 15% to 25% weight loss occurring during hibernation. Bears remain in a semi-hibernation mode for three weeks or more after emerging from their dens, during which time they eat and drink very little (Rogers 1987).

Black bear research has demonstrated a sequence of den entrance correlated with sex and age. Pregnant females enter earliest, followed by other adult females, subadults (females generally before males), and lastly, adult males (Reynolds and Beecham 1980, Lindzey 1981, Beecham et al. 1983).

Mature males begin dispersing from the den sites earliest, followed by subadult males, adult females without cubs, adult females with cubs, and then subadult females (Reynolds and Beecham 1980, Johnson and Pelton 1980, Rogers 1987, Beecham et al 1983, and Tietje and Ruff 1980). Females with cubs may emerge 1-3 weeks later than other bears and remain inactive in the vicinity of the den site for a longer period of time.

Montana research has identified den entry to occur between October 14 and December 7, and den exit between March 21 and May 7 (Kasworm and Thier 1991, Mack 1990, Jonkel and Cowan 1971, Kasworm and Brown 1983, Aune and Kasworm 1989).

Population Dynamics:

While habitat quality is the ultimate limiting factor for bear densities, three other factors are also important in determining bear numbers: nutrition, subadult dispersal and infanticide (LeCount 1982b). Bear densities can also be affected by hunting harvest.

Nutrition is the single most important factor determining reproductive success in black bears (Rogers 1983, Beecham 1980b and 1983). Bear reproductive and mortality rates vary annually with food supply (Miller 1990). An ample food source in the fall is critical for survival of cubs of the year as well as production of cubs the following spring. Females typically exhibit "skips" in their reproductive cycle following a fall with poor mast production. Delayed implantation is thought to be an adaptation to irregular food supply. If a pregnant female is not in good physical condition by fall, or if forage conditions are poor, the fertilized egg will not implant in the uterus. In addition to serving as a birth control mechanism, delayed implantation allows adult females to conserve energy during the late summer and early fall.

Natural mortality of cubs is difficult to document but has been found to vary from 12% to 48% annually (Rogers 1977, Kemp 1972, DuBrock 1980, Elowe and Dodge 1989, Beck 1991 and Erickson et al. 1964). Mortality of cubs appears to be a function of several factors including spring weather, food supply, predator numbers, the mother's experience, and man-caused mortality (Beck 1991).

Mortality of subadult bears (less than 5 years of age) is associated with dispersal and may often be induced by social pressure exerted by adult members of the population. Researchers have reported adult males killing subadult males as they disperse (Jonkel and Cowan 1971, Poelker and Hartwell 1973, Kemp 1976 and Rogers 1987). Several studies point to aggression by adult black bears as the major factor in population regulation, prompting dispersal and death of subadults (Beecham 1980a, Hugie 1982, Young and Ruff 1982 and Rogers 1983). Bunnel and Tait (1981) pointed out that older males provide an ideal regulatory mechanism because they are subject to very few forms of mortality. The mortality rate of subadults was found to be 36.8% in NW Montana (Thier 1990).

Young males have lower survival rates than young females (Jonkel and Cowan 1971, Koch 1983, Rogers 1987, and Elowe and Dodge 1989. Young males tend to disperse farther from their mother's home range and thus have a significantly higher chance of encountering older male bears, hunters and other factors that increase mortality rates. Malnutrition, thought to be most common in subadults when they disperse, also contributes to natural mortality. Jonkel and Cowan (1971), Kemp (1976) and Rogers (1977) documented malnutrition in black bear populations.

Researchers have estimated total adult mortality to be between 15% and 27% annually (Lindzey and Meslow 1980, Erickson et al. 1964, DuBrock 1980, Thier 1990, Poelker and Hartwell 1973, and Kohn 1982). Thier (1990) recorded an annual adult mortality rate of 25%, slightly higher for males (25.1%) than for females (22.7%). The higher mortality rate of males has been attributed to their larger home range size (Bunnel and Tait 1985) and their less wary nature (Beecham 1980a). Stewart and Simmons (1989) reported an average mortality rate of 16% for marked black bears, while Jonkel and Cowan (1971) estimated natural mortality rates for adults at 14%.

Black bears are subject to predation by grizzly bears (Ross et al. 1988) and by wolves (Rogers 1987, Ross et al. 1988, Rogers and Mech 1981). Black bear mortality attributed to grizzly bears was reported by Jonkel and Cowan (1971). Aune and Kasworm (1989) found hair from black bears in grizzly scats.

Black bears have been reported to live to 32 years old in the wild. The oldest black bears reported in the Montana harvest were a 30-year old male and a 29-year old female.

Bunnel and Tait (1985) suggest that at least 50% of the mortality experienced by North American bear populations can be attributed to hunting. Several authors have stated that hunting harvest limits population size (Bunnel and Tait 1985, Hugie 1982, DuBrock 1980 and Thier 1990).

Sport hunting of black bear populations, and other wildlife populations, is based on the concept of "sustained yield." The principle of sustained yield management is that wildlife populations produce an annual increment of animals that can be removed without causing the population to decline. The size of the annual surplus varies by species (factors such as proportion of females in the population and average litter size) and according to local conditions (factors such as habitat quality and population density). Annual hunting harvest is managed at a level corresponding to the capacity of the population to compensate (via reproduction and recruitment rates) for hunting mortality. To a point, hunting mortality is expected to be compensated by a corresponding decline in natural mortality (Kemp 1972 and 1976, Bunnel and Tait 1981, Miller 1990 and Schwartz and Franzmann 1991). Removal of some older males by hunting would be expected to reduce mortality of subadult bears that otherwise would be expected to occur as a result of aggression by adult males. Conversely, an unhunted black bear population would be expected to exhibit higher natural mortality of subadults as a result of aggression by older males. Barber and Lindzey (1986) state that since hunting is a major cause of mortality in many black bear populations, it will influence the degree of turnover in the adult male cohort, and presumably, the incidence of infanticide attributable to older bears.

Bear densities are limited primarily by food availability (Rogers 1976, LeCount 1987, Graber 1982, Grenfell and Brody 1983, and Elowe 1989). Reproductive rates of bear populations, however, are largely a function of nutrition rather than bear density (Jonkel and Cowan 1971, Rogers 1976, Beecham and Reynolds 1977, LeCount 1977, Bunnel and Tait 1981, and Elowe and Dodge 1989). Black bears then, cannot be expected to respond to heavy hunting harvest with compensatory reproductive responses such as larger litter size or younger breeding age (both of which are characteristic of species with density-dependent reproductive strategies). In fact, high adult mortality may result in a younger age population and lower productivity (Beecham and Zager 1992). It follows that there is a "threshold of mortality," below which the reproductive capacity of a bear population can compensate for hunting mortality. If total mortality exceeds the threshold, hunting mortality will in effect become additive (to natural mortality rates) rather than compensatory (Miller 1990). Examples of this threshold have been described by LeCount (1986) and Elowe (1989).

Vulnerability of black bear populations to hunting harvest varies according to habitat and levels of access. Bears are least vulnerable where cover is dense and expansive and most vulnerable in highly roaded areas that feature limited security cover. Vulnerability of individual bears to hunting harvest is influenced by sex and age. Adult males are

typically most vulnerable because they have the largest home ranges and are most likely to exhibit bold behavior. Consequently, the adult male segment of a population is the first to be reduced through hunting harvest. Subadult males are slightly less vulnerable. Due to their smaller home range and more wary nature, females are least vulnerable, especially those with cubs. Therefore, a high proportion of females in the harvest is generally indicative of excessive hunting harvest.

Most black bear management programs include safeguards to assure moderate harvest of females (Beck, Beecham, Garshelis and LeCount-pers. comm.). This strategy is intended to keep hunting harvest below the threshold of mortality, maintaining harvest rates within the reproductive capacity of the population to compensate for hunting mortality. Managed below this threshold, bear populations can sustain continued, regulated hunting harvest (Kemp 1972, Wakefield 1972, LeCount 1977, Poelker and Parsons 1977, Reynolds and Beecham 1980, and Servheen 1989).

Assessment of population status and trend:

Several attributes of black bears render free-ranging black bear populations difficult to census. The fact that black bears are solitary animals of the forest limits their observability from both the ground and the air. Black bears travel great distances, but unlike many other species, they are neither territorial or migratory. Their movements may vary substantially season to season and year to year, according to availability of staple food sources. All of these attributes of bear populations result in limitations on the amount and quality of population data that can be obtained.

Population data that can be obtained on limited areas and then extrapolated to larger areas of bear habitat include density estimates and observed mortality rates obtained through the use of marked bears. An attempt in the mid-1980s to obtain density estimates for Montana black bear populations through the use of scent station surveys did not prove to be workable. Late summer aerial surveys of high elevation shrub fields (featuring huckleberry and mountain ash primarily) in a portion of the northwest corner of the state (Region 1) have provided useful reproductive and density information for local black bear populations since 1982. Remote cameras have been used successfully on an experimental basis to obtain information on bear density in the South Fork of the Flathead River, northwestern Montana (Mace, pers. comm.).

Density estimates are a desirable parameter to estimate population size. However, due to the expense and logistics of trapping, marking and monitoring marked bears, the limited applicability of aerial surveys, and expense of using remote cameras, managers rely primarily on a combination of population indicators to indirectly assess and monitor population trend and composition. Likewise, determining sustainable rates of harvest requires use of multiple population indicators.

Age structure and sex ratio of hunter harvested bears are parameters conventionally used to assess black bear population status and trend. Other parameters commonly measured and monitored include total hunting harvest, hunter effort and hunter success rates, and mortality from control actions. Proper interpretation of sex and age ratios requires supplemental information on productivity (which may vary from year to year), natural mortality and food availability (Gilbert et al 1978, Waddel and Brown 1984). Interpretation of trend must also be done in the context of historical information, knowledge of interchange between bear populations (dispersal and immigration), changes in habitat factors affecting vulnerability to hunting harvest such as road and trail densities, and information on hunter effort. Without knowledge of these factors, harvest data can be misinterpreted. For example, an increasing harvest can be indicative of a population decline as well as a population increase. An accurate interpretation of harvest data is dependent upon examination of additional indices (including hunter effort, age and sex ratios and productivity).

Black bear populations typically exhibit a declining ratio of males to females with age (Beecham 1983). This pattern is attributed to the more rapid depletion of males in each age class because of the greater vulnerability of males to hunting and hunter selectivity (McIlroy 1972, Gilbert et al. 1978, Fraser et al. 1982, Harris and Metzgar 1987a, Miller and Miller 1988, Miller 1990). As the harvest rate increases, the proportion of subadult bears in the harvest increases as the proportion of adult males declines. Generally, in populations subject to light-to-moderate hunting pressure, males predominate in the harvest, and as hunting harvest increases, females and subadults constitute an increasingly larger proportion of the harvest, an indicator of excessive harvest that could lead to a population decline (Kolenosky 1986 and Harris 1984). A high proportion of subadult bears and low numbers of adult males in the harvest may indicate a heavily hunted population (Bunnel and Tait 1985, McIlroy 1972, Beecham 1980a and 1983). Bunnel and Tait (1980, 1985) concluded that a preponderance of males in the harvest generally indicates a preponderance of females in the population and that an equal sex ratio in a large kill suggests very heavy hunting pressure.

There is no cookbook approach to black bear management. Garshelis (1990, 1991) maintains that here is no best single technique for monitoring black bear population trend and that bear management is as much an art as it is a science. He recommends that it is best to monitor as many population parameters as possible and concludes that population trend is best indicated by several indices pointing in the same direction. For these reasons, and the fact that the amount and quality of obtainable population data varies among black bear populations, knowledge of the area and professional judgement play a significant role assessing population status and trend. Miller (1990) recommends that managers strive to maintain populations characterized by high average reproductive rates and low average natural mortality rates. He cautions that optimum population size will probably never be known since bear reproductive and mortality rates vary annually with

food supply. He stresses that it is important to know what rates of harvest are sustainable and at what point that rate is exceeded.

Evolution of black bear management in Montana:

Bears and people have coexisted in North American for thousands of years. Black bears figured prominently in the rites and traditions of native peoples, who both hunted and revered bears. In recent history both black bears and grizzly bears were viewed with fear and intolerance - as dangerous predators, competitors and pests (Yodzis and Kolenosky 1986, Miller 1990). Efforts to exterminate bears through trapping, unrestricted killing and government sponsored bounty programs reduced bear populations substantially, especially in the southern and southeastern U.S. (Aderhold 1984, Garshelis 1990). In recent decades, a prevailing utilitarian, exploitive attitude toward black bears has given way to one of greater understanding and appreciation (Kellert and Westervelt 1982). Today, black bears are valued as an important component of the ecosystem, and admired by those who seek to watch, photograph and hunt them.

Black bear hunting, a long-standing tradition in Montana, has historically been a primary focus of black bear management, as well as a funding source for the black bear management program. All black bear management activities are funded by hunting license revenues and federal Pittman Robertson (PR) matching funds collected in the form of an excise tax on firearms and ammunition sales. Hunter participation in Montana is substantial. In 1992, 26,780 black bear licenses were purchased (Figure 5). Prior to 1992, black bear licenses included in the 17,000 big game combination licenses issued to nonresident hunters. Beginning in 1992, nonresident black bear hunters, including those holding nonresident combination licenses, were required to purchase a nonresident bear license in order to hunt black bears in Montana.

A total of 11,850 hunters harvested 1,360 black bears in Montana in 1992 (Figures 6 and 7). The discrepancy between the total number of bear licenses purchased (26,780) and numbers of bear hunters afield (11,850) is due to the fact that a bear license is included with every resident sportsman's license issued (approximately 17,000). Although all resident sportsman licenses holders receive a black bear license, a substantial number of them do not go bear hunting. During the period 1971-1991, Montana's annual black bear harvest has averaged 1,474. The majority of the annual harvest (74%) occurs in western Montana (Regions 1 and 2). The annual harvest is divided equally between the spring and fall hunting seasons, with 50.1% of the harvest occurring during the fall and 49.9% in the spring. Montana's annual black bear harvest is comparable to that of Alaska and Maine, ranking fourth in the nation behind Washington, Oregon and Idaho.

Use of dogs for bear hunting was prohibited in Montana in 1921 and black bears were designated as big game animals in 1923. From 1943 through 1959, black bears were

Figure 5

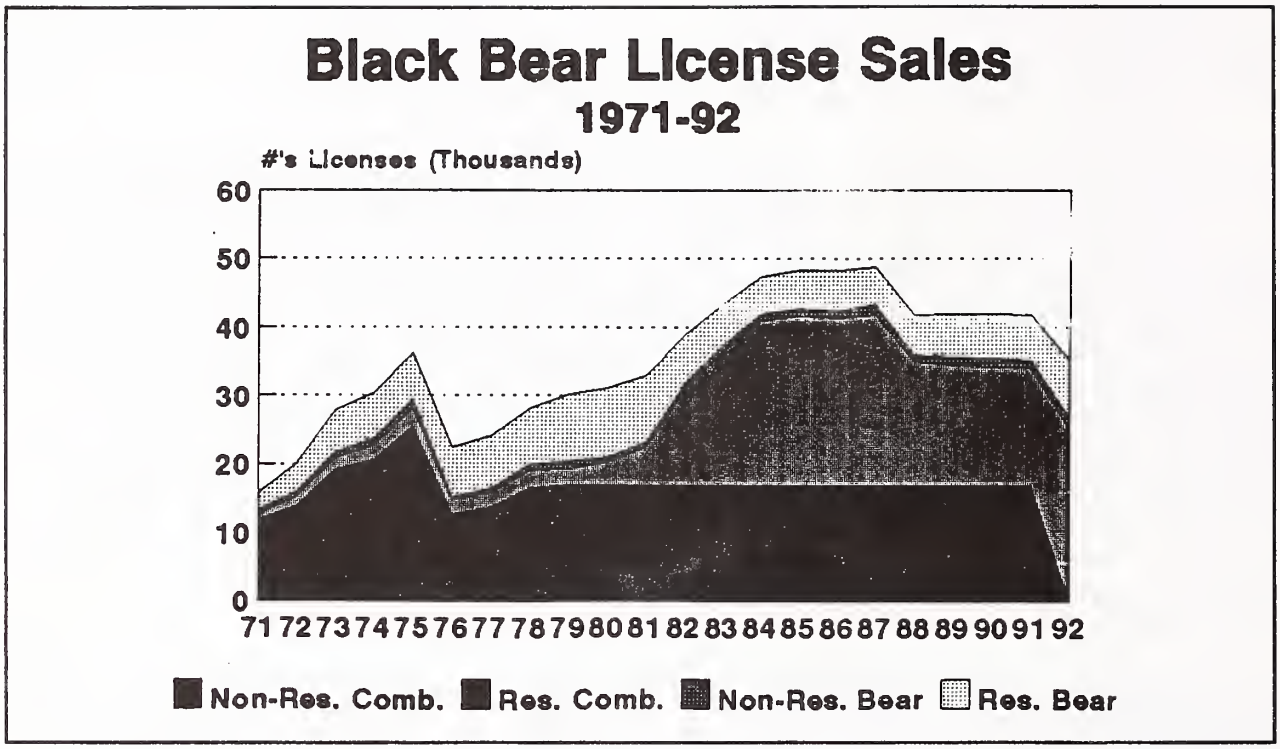


Figure 6

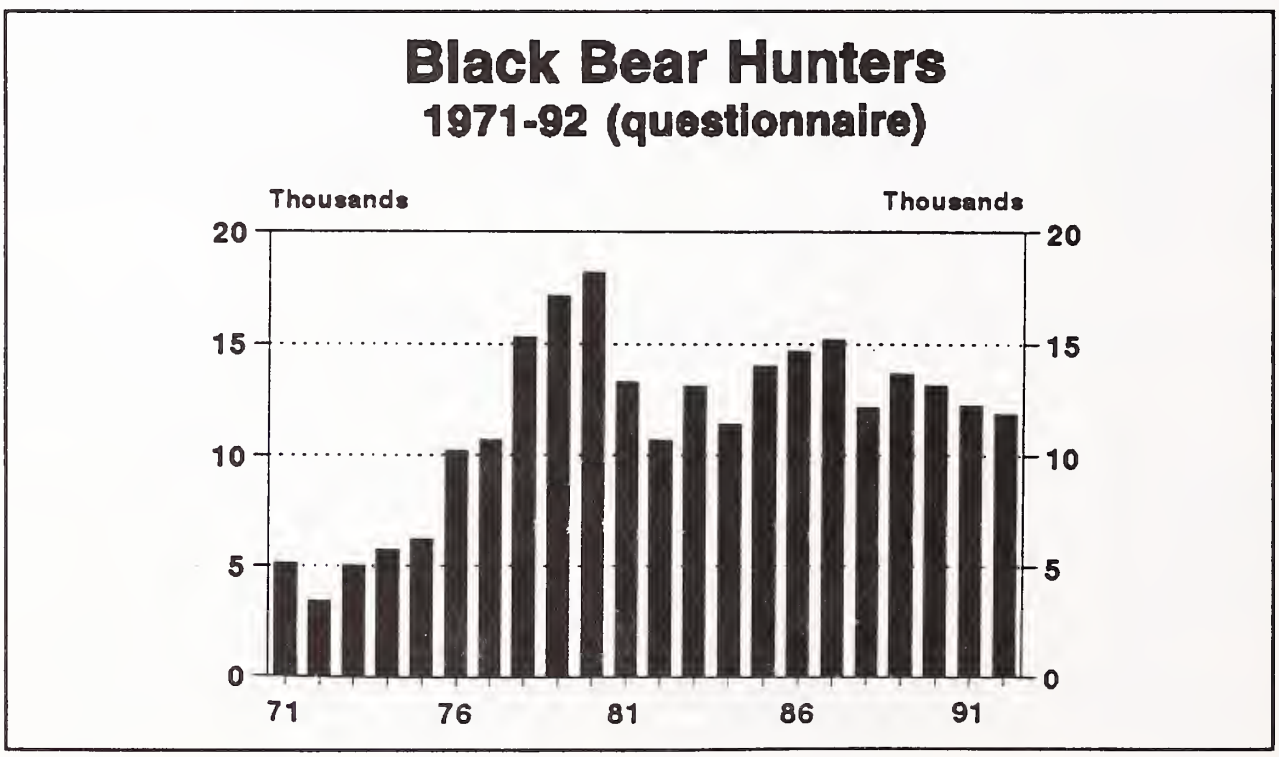
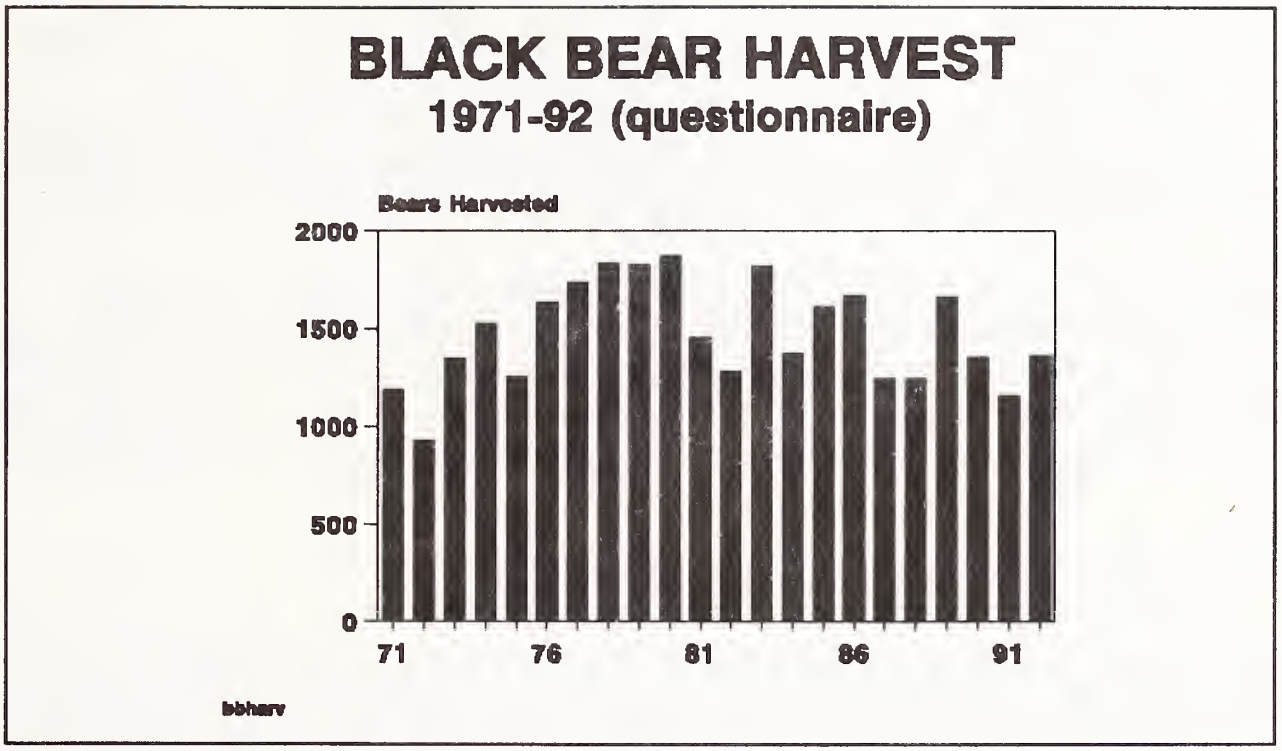


Figure 7



hunted for one month in the spring and again in the fall, from the opening of the big game season until the Sunday after Thanksgiving. A prohibition on the killing of cubs, or females with cubs, was instituted in 1947. A prohibition on use of baits to harvest bears was enacted in 1948. From 1959 through 1970, the bear season opened in mid-March and continued until the close of the big game season. In 1971 resident hunters were required to purchase a black bear hunting license to legally take a black bear. Prior to 1971, resident hunters could legally harvest a bear if they had a deer or elk license in their possession. Nonresident bear licenses were made available in 1961. Advances in radio telemetry technology and development of safe and reliable immobilization drugs for black bears made research efforts more feasible, beginning in the early 1970's. During the mid-1970s, increasing concern about black bear harvest levels prompted more restrictive hunting regulations. Separate spring and fall hunting seasons were again initiated in Region 1 in 1977, with other regions following suit during subsequent years. Concern in the early to mid-80's was focused on sex and age composition of bear populations, particularly the female segment. In 1985, a mandatory skull inspection/tooth collection program was implemented to obtain better information on age of animals harvested. In 1987, harvest quotas were instituted in southcentral Montana (Region 5) to lend protection to the female segment of black bear populations.

Incremental changes in the state's management program during the past 20 years were designed to protect bear populations from excessive harvest, especially mature females.

The progression of incremental changes coincide with increasing hunting pressure, escalating pressures on black bear habitats, and increased public interest in both black bears and grizzly bears. Management of black bears has become increasingly controversial. In recent years, black bear management programs in other states have been subjected to legal challenge. Primary issues of debate include hunting with dogs, use of bait, spring hunting, and public sentiment against any hunting of black bears.

During 1992 and 1993, Montana's black bear management program was critically reviewed by FWP personnel and a literature search was conducted to evaluate the existing program and to compare it with those in other states and provinces. That review and a public scoping process culminated in a list of recommended changes to the existing black bear management program which are embodied in the Proposed Action outlined in this FEIS.

SOCIAL AND CULTURAL

During the past decade, interest in Montana, its scenic and wildlife resources, and its recreational opportunities has elevated the stature of our state as a vacation destination - both nationally and internationally. This increasing interest is reflected in upward trends in demand for Montana hunting licenses, recreational use on national forests in the state, and numbers of visitors and backcountry use in Glacier National Park (Dood and Pac 1993). Montana has also become a destination for residents of other, more populous states, who are relocating here in search of a simpler lifestyle and higher quality of life. Recent articles in publications such as Time and Newsweek magazines, as well as Montana newspapers, have documented an on-going influx of new residents to Montana and other Rocky Mountain states. A continuing influx of new residents is resulting in diversification of public attitudes toward wildlife as well as public desires for wildlife-related recreational opportunities. Pursuit of a rural lifestyle by increasing numbers of people is fueling development of rural subdivisions in or near black bear habitats, which is resulting in an increased incidence of human/black bear conflicts.

Many Montana residents fear that the on-going influx of new residents will result in loss of black bear habitat as a result of urban sprawl; an increased incidence of human/bear conflicts that could result in a lower tolerance for black bear numbers; and an increase in anti-hunting sentiment. Bear hunters expressed a desire for the state's black bear management program to be credible and able to withstand scrutiny of those who do not hunt or do not value the strong hunting tradition in Montana.

The alternatives considered in this FEIS have the potential to impact black bear recreational opportunities available to the public, both hunting and non-hunting, as well as the incidence of human/black bear conflicts. Changes in recreational opportunities may also result in impacts to the economy of local communities.

DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

The Proposed Action (Alternative 1) was formulated by FWP and then revised in response to comments received during the public scoping process. The No Action Alternative (5) represents the existing black bear management program (status quo). Other alternatives to the Proposed Action (2, 3 and 4) were formulated following public input during the public scoping process. A description and analysis of each of the five alternatives follows. Regardless of which of the five alternatives is ultimately adopted, elements requiring action on the part of FWP or the FWP Commission could become effective in 1994. Elements requiring legislative action would be presented to the Montana Legislature in 1995.

ALTERNATIVE 1 (PROPOSED ACTION)

The Proposed Action (Alternative 1) is comprised of 30 elements. Implementation of the Proposed Action would require FWP to make decisions regarding program direction, procedures and policy and to undertake a formal rule making process that includes provisions for public participation (Table 1 and Table 2). It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

The emphasis of the Proposed Action is to: improve the amount and quality of biological data collected, improve FWP capability to monitor population status, composition and trend; improve regulation of annual hunting harvest in response to changes in population trend; provide more effective protection for the female segment of black bear populations; and enhance public understanding of black bear biology, habitat requirements and management practices. The goal of the Proposed Action is the achieve and maintain a more conservative harvest of black bears, especially female bears. The 30 elements of the Proposed Action are as follows:

ELEMENTS OF THE EXISTING MANAGEMENT PROGRAM TO BE CONTINUED

A) Continuation of the existing spring and fall black bear hunting season format (no summer hunting season).

RATIONALE: Keep black bear populations "wild" by maintaining wariness of humans; focus hunting harvest on the male segment of bear populations through the use of a spring hunting season to minimize the incidence of bear depredations and other human/bear conflicts; and provide hunting recreation desired by the public.

Table 1. Element Description.

ELEMENTS	DESCRIPTION
	EXISTING
A	Hunting season format that includes both spring and fall hunting
B	Use of harvest quotas in some hunting districts
C	Use of ADC bear mortality data in population monitoring
D	Mandatory inspection of skulls of all harvested black bears
E	Prohibition on baits and hounds to pursue or harvest black bears
F	Assist beekeepers to implement preventative measures
G	Distribute information on bear biology and habitat requirements
	ADJUSTMENTS
H	Delineate new black bear management units
I	Adopt Sept. 15 as the earliest opening date for fall hunting
J	Adopt April 15 as the earliest opening date for spring hunting, and May 31 as the latest closing date
K	Inform the public about consequences of living in black bear habitat and how to prevent human/black bear conflicts
L	Expand emphasis on hunter ethics for both adults and youth
	NEW INITIATIVES
M	Management targets intended to maintain conservative harvest
N	Mandatory inspection and tagging of hides of harvested bears
O	Remove black bear license from the resident sportsman's package
P	Upgrade FWP shelter in Helena to better accommodate orphaned cubs
Q	Improved documentation/reporting system for illegal activities
R	Improved documentation of nuisance bear complaints and follow-up
S	Curtail chronic bear/human conflicts caused by human negligence
T	Improved handling of ADC data on depredation complaints and control actions
U	Require hunters to use meat of harvested black bears
V	Revise statute addressing waste of fish or game (87-3-102 MCA)
W	Revise statute addressing baiting (87-3-101 MCA)
X	Clarify statute addressing use of hounds by FWP, ADC or agricultural operators to control depredating bears (87-3-127 MCA)
Y	Work with other entities to develop black bear habitat criteria
Z	Produce an annual, standardized statewide black bear report
	PUBLIC INITIATIVES
I	Encourage ADC to assist only those bee keepers who use preventative measures to protect their hives
II	Maintain bear-proof garbage containers at FWP facilities and actively encourage other agencies and private interests to do the same
III	Explore the potential to initiate a research effort to evaluate management targets (outlined in Element M) and refine them if necessary.
IV	Explore the potential to initiate a research effort to provide needed information for use in developing habitat criteria (Y)

Table 2. List of program elements by alternative and decision authority.

ELEMENTS	ALTERNATIVES					DECISION AUTHORITY*			DECISIONS TO IMPLEMENT	ADDITIONAL RESOURCES REQUIRED TO IMPLEMENT
	#1	#2	#3	#4	#5	FWP	C	LEG		
EXISTING										
B	X		X		X		X		Hunting Season Format/Regulations	None
B	X	X	X		X		X		Hunting Season Format/Regulations	None
C	X	X	X	X	X	X			Program Procedures	None
E	X	X	X		X	X			Program Procedures/ARM Rule	None
E	X	X	X	X	X			X	Montana Law	None
E	X	X	X	X	X	X			Program Prioritization	None
C	X	X	X	X	X	X			Program Prioritization	None
ADJUSTMENTS										
H	X	X	X	X			X		Hunting Season Format/Regulations	None
I	X						X		Hunting Season Format/Regulations	None
B	X						X		Hunting Season Format/Regulations	None
K	X	X	X	X		X			Program Prioritization	Redirection
L	X	X	X			X			Program Prioritization	Redirection
NEW INITIATIVES										
M	X	X	X			X			Program Procedures	None
N	X	X	X			X	X		Program Prioritization, ARM Rule & Hunting Regulations	Redirection
Q	X	X	X					X	Legislation	None
P	X					X			Program Prioritization	Redirection
Q	X	X	X	X		X			Program Procedures	None
R	X	X	X	X		X		X	Program Procedures, Legislation	None

ALTERNATIVE #1 = the Proposed Action
ALTERNATIVE #2 = termination of spring black bear hunting
ALTERNATIVE #3 = fall hunting season and a spring hunting season regulated by quota
ALTERNATIVE #4 = no black bear hunting
ALTERNATIVE #5 = No Action

*FWP = Montana Department of Fish, Wildlife & Parks
C = FWP Commission
LEG = Montana Legislature

ELEMENTS	ALTERNATIVES					DECISION AUTHORITY*			DECISIONS TO IMPLEMENT	ADDITIONAL RESOURCES REQUIRED TO IMPLEMENT
	#1	#2	#3	#4	#5	FWP	C	LEG		
S	X	X	X	X		X		X	Program Prioritization, Legislation	Redirection
T	X	X	X	X		X			Program Procedures	None
U	X	X	X			X	X	X	Program Prioritization, Hunting Regulations, ARM Rule, Legislation	Redirection
V	X	X	X				X	X	Program Procedures, Hunting Regulations, Legislation	None
W	X	X	X	X				X	Program Procedures, Legislation	None
X	X	X	X	X				X	Program Procedures, Legislation	None
Y	X	X	X	X		X			Program Priorities	Redirection
Z	X	X	X			X			Program Procedures	Redirection
PUBLIC INITIATIVES										
I	X	X	X	X		X			Program Procedures	None
II	X	X	X	X		X			Program Procedures	None
III	X	X	X	X		X			Program Prioritization	Redirection
IV	X	X	X	X		X			Program Prioritization	Redirection

ALTERNATIVE #1 = the Proposed Action
ALTERNATIVE #2 = termination of spring black bear hunting
ALTERNATIVE #3 = fall hunting season and a spring hunting season regulated by quota
ALTERNATIVE #4 = no black bear hunting
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*FWP = Montana Department of Fish, Wildlife & Parks
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McCollough (1982) states that frequent encounters between bears and humans, without at least occasional reinforcement of fear in the bear, will result in habituation to humans. He further states that the role of hunting, originally by aboriginals, and more recently by sport hunters, in producing "wildness" and human avoidance in bears cannot be underestimated. Males are killed by hunters at a higher rate than they occur in the population due to their larger home ranges and higher probability of being encountered by hunters (Jonkel and Cowan 1971, Kemp 1976, Sitton 1982, Koch 1983, and Elowe and Dodge 1989). Nuisance bears are generally heavily oriented toward males (Klenner 1987, Garshelis 1989). Under the existing hunting season format, most harvest of adult, male black bears takes place during the spring season (Appendix 2, Figs. 4 and 5), primarily during the first 3 weeks of May (Appendix 2, Fig. 8).

DECISION AUTHORITY: FWP Commission.

B) Continued use of harvest quotas, including female subquotas in some black bear management units.

RATIONALE: Regulation of hunting harvest, especially of female bears, is particularly important in areas where bears are particularly vulnerable to hunting pressure and/or in areas where adult females are being harvested at rates deemed to be excessive. Harvest quotas, including female subquotas, have proved to be an effective means of regulating the mountain lion harvest statewide. Quotas have also proven an effective means to regulate black bear harvest in southcentral Montana (Region 5). The quota system in Region 5 is credited with reducing annual hunting mortality from 16% (pre-quota) to 12%. Use of a quota system to regulate harvest is also acceptable to hunters. 48% of respondents to a recent survey of black bear hunters expressed preference for use of unlimited hunting until a specific quota is reached as means to reduce black bear harvest (Brooks 1993).

DECISION AUTHORITY: FWP Commission.

C) Continue to consider black bear mortalities resulting from Animal Damage Control actions (ADC:APHIS, U.S. Dept. of Agriculture) in monitoring of population trends, including sex and age composition of black bear populations.

RATIONALE: Most black bear depredation occurs during the months of August and September and involves either sheep or bees. Approximately 35 black bears are destroyed annually in Montana by ADC and FWP personnel (Appendix 6). This element is intended to ensure that data from black bears killed during control actions will be used to supplement data from hunter harvested bears. This will in turn assure that estimates of population trend and sex composition as well as harvest quotas, reflect removal of black bears as a result of control actions.

DECISION AUTHORITY: FWP.

DECISION AUTHORITY: FWP.

D) Continue the existing requirement that all black bear skulls be presented to a FWP representative so that a tooth can be extracted and subjected to laboratory analysis for age determination.

RATIONALE: Obtain reliable data on age of harvested bears that facilitates the capability to monitor age composition of bear populations. Premolars collected at the time of skull inspection are sent to a private laboratory for age determination. When sectioned, a bear premolar exhibits cementum annuli (similar to tree growth rings) that can be counted under a microscope. The accuracy of the cementum analysis technique has been validated by a comprehensive study of known-age grizzly bear teeth (Matson et al. 1993) (Appendix 7, Figure 1). The cementum annuli in teeth of black bears are more distinct and more regularly arranged than those of grizzly bears so aging of black bears can be expected to be even more accurate than for grizzly bears (Matson, pers. comm.). Potential error is minimal for bears younger than age 9 or 10 and greatest for bears in the 18-25 year age group (Appendix 7 Fig. 1). Tooth data compiled since 1985 provides valuable insight to age structure of black bear populations (Appendix 7). FWP has, and will continue to rely on use of age structure information to determine allowable rates of harvest for black bear populations.

DECISION AUTHORITY: FWP.

E) Continue prohibition of baits and hounds (including chase-only seasons) to pursue or harvest black bears.

RATIONALE: Avoid increasing existing harvest rates, particularly for females, and remain responsive to public sentiment against these activities. Those who advocate use of dogs to hunt black bears maintain that hunting with dogs facilitates sex and age identification prior to harvest, which would promote harvest of mature males rather than females and younger bears. Opposition to use of dogs to hunt bears is rooted in the following concerns: 1) Bears are not physically adapted to run long distances or for long periods, 2) grizzly bears would be subject to pursuit since dogs do not distinguish between grizzly bears and black bears, 3) pursuit of grizzly bears with dogs is a federal offense under CFR 50, 4) hounds in pursuit do not distinguish between male and female bears, 5) potential impacts to other species in the fall, as well as impacts on fall big game hunting activities, 6) potential impacts in the spring to deer, elk and other species that bear young during spring months, 7) potential separation of the sow from the cubs during pursuit, and the possibility that orphaning or cub mortality would result, 8) belief that allowing hunting with dogs would increase commercialization of black bear hunting, and 9) the likelihood that black bear hunting seasons would have to be shortened to compensate for increased harvest rates attributable to hound hunters.

Use of bait is a very efficient means to harvest bears, resulting in hunter success rates of 25 to 50% in states where baiting is legal. Such an elevated hunter success rate would

prompt the need for adjustments in hunting season format (reduced season length and/or limited participation) to prevent overharvest. If baiting were to be legalized, escalation of harvest rates would be especially pronounced during years when food is scarce.

Those who advocate baiting argue that it facilitates identification of species, sex and age prior to harvest and would increase harvest of older, trophy males rather than younger bears. Opposition to baiting is rooted in the belief that it is unethical and contrary to the concept of "fair chase" to hunt wildlife with dogs, and, therefore, potentially detrimental to the future of traditional sport hunting. This is also the basis on which it has been challenged in other states where it remains legal. Baiting also poses the potential problem of habituating black bears to food sources that could subsequently cause human/bear conflicts, including livestock depredation (Aderhold 1984). Institution of baiting to harvest bears would also be expected to increase commercialization of black bear hunting.

DECISION AUTHORITY: Montana Legislature.

F) Encourage beekeepers in areas of chronic black bear depredation to use preventative measures available through the FWP game damage program. Preventative measures include materials for hive platforms and electric fencing.

RATIONALE: In Montana, most recorded black bear depredation on livestock involves sheep and bees. Use of preventative measures reduces FWP and ADC expenditures associated with responding to depredation complaints, as well as long-term losses by bee keepers. Preventative measures are the most obvious and sensible means of minimizing the incidence of black bear depredations as well as minimizing the need for subsequent control actions by ADC or bee keepers.

DECISION AUTHORITY: FWP.

G) Continue to inform the public about the biology and habitat requirements of black bear populations via Project Wild workshops for teachers, videos, Montana Outdoors articles and other media outlets.

RATIONALE: Provide the public with information to use in making land use decisions that will affect black bear populations as well as the incidence of human/bear conflicts. In addition to providing information to the general public, emphasis would be placed on providing information to city and county planning boards and other planning bodies. Long-term maintenance of important black bear habitats and minimizing the incidence of human/bear conflicts are dependent on consideration of black bear habitat needs during city and county planning processes.

DECISION AUTHORITY: FWP.

ADJUSTMENTS TO THE EXISTING MANAGEMENT PROGRAM

H) Delineate new black bear management units to serve as the basis for black bear management actions, including hunting regulations.

RATIONALE: Refine the black bear management program by tailoring management activities to geographic areas delineated on the basis of habitat features that influence bear populations, and attributes that influence vulnerability, including accessibility and hunting pressure. Black bear management units would replace the current practice of applying black bear management activities and hunting regulations to 138 deer/elk hunting districts in regions 1 through 5. In addition to tailoring bear management activities to various types of black bear habitats, adoption of the proposed black bear management units would improve resolution of data obtained via the annual hunter harvest telephone survey. Hunter harvest information would be compiled for each bear management unit, rather than the existing practice of compiling it by Region.

DECISION AUTHORITY: FWP Commission.

I) Adopt September 15 as the earliest opening date for the fall hunting season (the scheduled 1993 opening date is Sept. 4).

RATIONALE: Black bears are vulnerable to hunting harvest during the period that they maximize use of berry fields. Delaying the opening date of fall black bear season until mid-September would reduce a period of peak vulnerability of adult females and subadults to hunting harvest (Appendix 2 Figs. 9-11). In Region 1, 23% of the subadult female harvest occurs between September 1 and September 15 (Appendix 2, Fig. 11). A season opening date of September 15 would also coincide with the opening date for backcountry deer and elk, as well as moose, mountain goat, and most bighorn sheep seasons.

Delaying the fall hunting season until September would not have a disproportionate impact on archery hunting opportunity. Currently, there is no special archery-only season for black bears in Montana. If this element is adopted, bow hunters could continue to hunt with archery equipment during the general season.

DECISION AUTHORITY: FWP Commission.

J) Adopt April 15 as the standard (earliest) opening date for the spring hunting season May 31 as the latest closing date.

RATIONALE: These dates are proposed as "earliest" and "latest" dates - the hunting season could open later or end earlier to address conditions peculiar to any bear management unit, including snow melt and plant phenology. Mature males begin dispersing from den sites earliest, followed by subadult males, adult females without cubs, adult females with cubs, and then subadult females (Reynolds and Beecham 1980,

Johnson and Pelton 1980, Rogers 1987, Beecham et al 1983, and Tietje and Ruff 1980). Bear researchers agree that female black bears generally emerge from their winter dens later than males and therefore are increasingly vulnerable to hunting harvest as the spring progresses. Emergence of black bears in Montana generally occurs between March 21 and May 7 (Kasworm and Thier 1991, Mack 1990, Jonkel and Cowan 1971, Kasworm and Brown 1983, Aune and Kasworm 1989). The last two weeks of May is the period of peak harvest for all sex and age classes of black bears (Appendix 2, Figs. 8-11). Based on the apparent vulnerability of black bears to hunting harvest during the last half of May, it is anticipated that the spring season would be closed in many hunting units prior to May 31.

DECISION AUTHORITY: FWP Commission.

K) Step up efforts to inform people about bear biology, consequences of living in bear habitat, and measures to prevent conflicts with black bears (especially people who live in or near black bear habitat).

RATIONALE: Minimize the incidence of human/bear conflicts prompted by human negligence or ignorance, including habituation of bears to garbage or other food sources associated with human habitation. An effort would be made to focus on people who live in or near black bear habitat, a strategy emphasized by comments received during the public scoping process. Better informed residents practicing preventative measures should reduce the potential for bears to become habituated to humans. A well informed public is also able to make informed decisions about black bear management issues.

DECISION AUTHORITY: FWP.

L) Actively promote good hunter ethics through expanded education of both youth and adult hunters, with emphasis on the hunter's ethical and legal responsibility to be able to distinguish between a grizzly and a black bear, to identify black bears by sex and age class (subadult versus adult) and identify females with dependent young.

RATIONALE: Increased emphasis on hunter ethics is essential to perpetuation of Montana's hunting heritage. In addition to addressing hunter conduct, emphasis would focus on preventing mortality of grizzly bears as a result of being mistakenly identified as black bears and preventing orphaning of dependent young. Informational materials for sex and age identification could be developed along the lines of existing materials already developed for species identification (Appendix 4). Other means of presenting identification information, including video format, could be utilized.

DECISION AUTHORITY: FWP.

NEW PROGRAM INITIATIVES

M) Adopt the following management targets, which are designed to maintain a conservative harvest of female bears in all black bear management units:

a) No more than 40% of the annual harvest comprised of females
b) Median age of harvested bears at least 6.5 years for females and 4.5 years for males.
c) If harvest composition does not comply with a) and b) in any 3 consecutive years, all data from the management unit will be analyzed to determine what management changes are warranted.

RATIONALE: The three management targets outlined in this Element are intended to serve as "measuring sticks" as well as safeguards to prevent excessive harvest of black bear populations. They are designed to help managers maintain a conservative harvest of female bears and perpetuate a productive, diverse age structure in black bear populations. Proper management of sex and age structure is essential to perpetuating viable, self-sustaining black bear populations.

Research in Idaho indicates that lightly hunted populations had a high ratio of adults to subadults (70:30), a high percentage of adult males (35%) and a median age of 7.7 years (Beecham and Zager 1992). Data collected from heavily hunted populations showed adult:subadult ratios favoring subadults (40:60), fewer adult males (21%), and a median age of 2.5-3.5 years. Studies of bear populations in Alaska, Virginia and Arizona have shown similar relationships between lightly and heavily hunted populations (Beecham and Zager 1992)

If more than 40% of the annual harvest is comprised of females for 3 consecutive years, overharvest is likely occurring (Beecham, pers. comm.). Beecham further recommends that harvest be regulated to maintain female composition at 35% or less. Beecham recommends that the median age of harvested males be more than 3 years, with a goal of 5 years or more, and that median age of females should not drop below 4 years, with 6 years or more representing the desired level. Management criteria similar to those outlined in Element M which have been adopted by the Idaho Department of Fish and Game are presented in Appendix 8.

Tooth return data from Montana black bears indicates that females comprise slightly less (38.5%) than the upper limit of 40% of the harvest proposed in Element M (Appendix 7, Table 1). The Proportion of the annual harvest comprised by females is highest in Region 5 (42.9%) and lowest in Regions 1 (37.5%) and 4 (37.4%) (Appendix 7, Table 1).

The median age of female bears harvested in the Montana is generally highest in Regions 3, 4 and 5 (Appendix 8 Table 3). During the last 3 consecutive years, 1989 to 1991, Regions 1 and 2 were below the proposed management target of 6.5 years. The median

age of males in the harvest has been less variable year to year than that of females (Appendix 7, Table 4). With the exception of Region 2, the median age of harvested males has been in compliance with the proposed target of 4.5 years (Element M) during the past 3 years.

Other elements in the Proposed Action are designed to address the median age of females in the harvest as well as the proportion of the harvest they comprise. Elements B, E, H, I, J, L and N are designed specifically to provide protection to the female segment of black bear populations and reduce harvest of females. Implementation of these Elements should prompt a reduction in the proportion of female bears in the annual harvest and an increase in the age of females harvested.

Since black bears are particularly long-lived and don't produce cubs until age 6 or 7, and after that, only every third year, population changes can be difficult to detect in less than a span of several years. Year-to-year variation in harvest may simply reflect variation in availability of preferred bear foods, weather patterns and other factors peculiar to a local geographic area and its resident black bear population, rather than real changes in population trend. Hence, the three year period within which to determine whether a change in population trend has actually occurred.

DECISION AUTHORITY: FWP.

N) Institute mandatory inspection and tagging of the hide of every harvested black bear by a FWP representative within 5 days of kill (or within 5 days of arriving at a trailhead in the case of backcountry hunters). This would be accomplished at the same time that the head is presented to a FWP representative for inspection and removal of a tooth (currently required - Element D).

RATIONALE: Acquire improved data on sex and reproductive status of animals harvested. The percentage of females in the harvest is a sensitive indicator of population status and trend. Improved sex and reproductive data is required to monitor compliance with management targets listed in Element M. Information on sex composition of the harvest currently obtained through the annual hunter harvest telephone survey is skewed toward males (hunters report an unknown number of harvested females as males) (Appendix 7, Table 1). Hide inspection will provide accurate information on the sex of all bears harvested and provide information on reproductive status of females (whether or not a female has reproduced). Evidence of lactation provides FWP an opportunity to retrieve orphaned cubs. Mandatory hide inspection is also expected to curtail illegal harvest of sows with cubs, as well as illegal opportunistic harvest of bears followed by after-the-fact purchase of a black bear license. Mandatory hide inspection would render hunters more accountable (less opportunistic) with regard to harvest of females with dependent young and will afford FWP personnel the opportunity to compare the date of license purchase with the date that the bear was harvested.

DECISION AUTHORITY: Requires decisions by both the FWP and the FWP Commission.

O) Sell all black bear licenses individually, which requires removing the black bear license from the resident sportsman's license package (as was done with the nonresident big game combination license in 1992).

RATIONALE: Limit possession of black bear licenses to individuals who are interested enough in bear hunting to buy a hunting license specifically for black bears. This initiative is expected to result in: 1) Greater interest in, and knowledge of black bears as well as grizzly bears on the part of license holders; 2) Reduction in "incidental" or "opportunistic" black bear harvest that may currently occur without adequate attention to species identification or presence of cubs; and 3) enhance the ability of FWP to target license holders with informational materials on species identification and identification of sows with dependent young. This initiative will also improve the capability of the annual hunter harvest telephone survey to accurately gauge hunter effort, which in turn would enhance population monitoring efforts.

DECISION AUTHORITY: Montana Legislature.

P) Upgrade the FWP animal shelter in Helena to improve its capacity for humanely housing orphaned black bears and caring for them in a manner that reduces habituation to humans and promotes successful reintroduction to the wild.

RATIONALE: It is the policy of FWP to discourage citizens from disturbing or picking up young wildlife. In most cases, young animals discovered by hikers and other recreationists are not abandoned or orphaned, but have been hidden by their mothers who will return at a later time to feed them. Nevertheless, a certain number of animals are brought to the FWP shelter every year by people who believe them to be abandoned or orphaned. Some animals are also brought to the FWP shelter because of injuries sustained in accidents. Animals received at the shelter are fed and cared for during the summer by FWP employees and volunteer citizens and whenever possible, returned to their natural habitats in the fall.

The existing facility has proved to be inadequate to house and provide humane care to the number of black bears (11-13) that it houses every summer. Most bears delivered to the shelter are believed to have been orphaned during the spring hunting season. However, bears are occasionally brought to the shelter after being orphaned as a result of accidents or as a result of injuries sustained in vehicle or train collisions.

The opportunity to place bears in zoos is extremely limited due to the fact that captive black bears reproduce fairly well in zoo conditions. Therefore, bears received by the FWP shelter must either be reintroduced to the wild or euthanized. During the past 4 years, 43 orphaned bears have been placed in artificial den sites in an effort to return them to the wild (Yannone, pers. comm.). During the summer and fall they are fattened

on produce donated by Helena area supermarkets and after entering a state of hibernation, they are removed from the shelter and placed in dens constructed earlier in the year by volunteers. Limited monitoring of individual bears reintroduced to the wild in this manner suggests that this is a successful approach to accomplishing reintroduction. On that basis, FWP expects to continue this practice.

In addition to providing adequate facilities and staff to care for orphaned bears, some degree of isolation from the sight, sounds and smells of humans would be expected to enhance the success of reintroduction for the wild. It is anticipated that most funds required for a remodeling/expansion effort would come from private sources. However, adequate staffing for the facility would have to be funded by FWP.

DECISION AUTHORITY: FWP.

Q) Institute an improved documentation and reporting system for illegal activities involving black bears.

RATIONALE: Improved records management and analysis would foster regular evaluation and improvement of existing regulations and enforcement efforts; facilitate effective response to trends in illegal activities; serve as a basis for prioritizing enforcement activities, curtail poaching of bears and trade in bear parts; and facilitate consideration of illegal black bear mortality in assessment of population status and trend.

Participants in the public scoping process suggested that a cut-off date be implemented for purchase of black bear hunting licenses to curtail incidental or opportunistic harvest of black bears (without appropriate consideration for identifying sex or species) and eliminate the opportunity to purchase a license following an illegal kill. This element, in conjunction with Element N would facilitate collection of information required to determine whether and to what extent the opportunity to purchase a bear hunting license during the hunting season is facilitating illegal activities.

Participants in the public scoping process expressed a desire for additional enforcement effort directed specifically toward curtailing illegal activities involving black bears, including illegal trade in black bear body parts. FWP anticipates that illegal exploitation of black bear populations will be of increasing concern to the public as well as to wildlife managers. During the 1980's, an illicit trade in bear parts began making newspaper headlines in Asia and North America. This trade has been recognized as a significant, although unquantified conservation problem (Bunnel and Tait 1985). Bears have been valued in Asia for centuries as food and medicine and bear gall is one of the most revered ingredients in Oriental pharmacopeia (Mills and Servheen 1991). The sum of marketable parts can make a dead bear worth $10,000 in Japan and even more in South Korea, where bear gall bladders are worth $11.53 per gram (Mills and Servheen 1991). They also state that increasing numbers of bear carcasses, with only the salable body parts missing, are being reported in North American as well as the Soviet Union. Evidence that black bears were being killed solely to obtain marketable body parts prompted

Alberta to amend its General Wildlife Regulations in December, 1989 to prohibit sale of all bear body parts except hides with attached claws (Alberta Environmental Protection 1993). Currently, it is legal in Montana to sell heads, hides (including attached claws) and mounts of black bears (Statute 87-3-111 MCA). It is illegal in Montana to sell bear teeth, claws, gall bladders and other body parts, as well as meat.

DECISION AUTHORITY: FWP.

R) Increase emphasis on records management and evaluation for nuisance bear complaints, improve coordination between the wildlife and enforcement divisions of FWP in addressing such complaints and pursue a change in statutes 87-1-231 (MCA) and 87-1-234 (MCA) to exempt nuisance bears and depredating bears captured at bee yards that have not been protected through electric fencing.

RATIONALE: The intent is to facilitate compliance with nuisance bear policy guidelines while minimizing the incidence of bear depredations that would be avoidable through use of preventative measures. Nuisance bear complaints and requests for control measures could be reduced if more bee keepers used proven preventative measures to avoid bear depredation. Data from nuisance bear incidents and control actions would be utilized in population trend monitoring efforts. Since data on bear populations is limited, all sources of population information warrant compilation.

The department is required to mark black bears to be relocated that have been involved in a livestock killing (87-1-231 and 87-1-234) (Appendix 9). The department is then liable for any future damage to personal property by these bears and must provide compensation (87-1-233). Therefore, the department has adopted a policy to destroy black bears that attack livestock resulting in injury or death (Appendix 10).

Existing statutes and rules classify bees as livestock. Therefore, the department's policy is to destroy black bears that attack beeyards and consume bees. Since beehive owners can effectively protect beeyards with electric fencing, and since the department's policy on bear depredation of beehives provides for financial assistance, the department proposes changing the statutes that now force the department to destroy black bears involved in beeyard incidents. Bees would remain classified as livestock. An exception will be proposed to exclude incidents involving black bear depredation when the beehive owner has not taken provisions to protect the hives from depredation through electric fencing or other effective measures.

Participants in the public scoping process expressed a preference for nonlethal means of addressing depredating and nuisance bear complaints. Efforts to develop nonlethal means of preventing damage to bee yards by black bears have been made. Electric fencing effectively prevented damage to both bee yards and bears (Gunson 1980) but subjecting offending bears to taste-aversive conditioning did not (Gilbert and Roy 1977, Dorrance and Roy 1978). Electroshock treatment of offending bears was reasonably effective only during the year of treatment but did not prevent repeat offenses in subsequent years.

Other than electric fencing for bee yards, translocation of an offending bear from one geographic location to another is the only known nonlethal means of addressing depredation and nuisance bears.

Relocation of nuisance bears presents several problems. A review of North American black bear translocation studies (Beak 1987) documented relocation success to be generally low - with return rates of 60% to 70%. Rogers (1986) working in Alberta concluded that adult black bears must be relocated a distance greater than 40 miles to ensure that less than 50% return. He found that older, more experienced bears are more likely to return than are subadults, and that females are more likely to return than are males. Relocation of grizzly bears in Montana resulted in a 51% success rate for first time offenders (Riley, pers. comm.). For 49 relocated grizzlies, factors influencing success of relocation proved to be sex and distance moved: 68% success for females compared to 37% for males; average distance of 71.7 mi. and 53.3 mi. for successful and unsuccessfully relocated bears, respectively (Riley, pers. comm.).

A concern about relocation of problem bears is that once a bear has learned to exploit garbage or other human food sources it is likely to continue that behavior wherever it is moved (Chambers 1975). Relocation of problem bears can therefore amount to translocating a problem from one geographic location to another. In Alberta, mortality of relocated bears is high in agricultural areas as a result of shootings by landowners or hunters, and most surviving relocated bears repeated damage or nuisance behaviors (Management Plan for Black Bears in Alberta, 1993). Due to problems associated with relocating black bears and the fact that other non-lethal means of dealing with problem black bears are limited, all Alternatives evaluated in this FEIS emphasize measures to prevent human/bear interactions, rather than after-the-fact means of addressing problem bears.

DECISION AUTHORITY: FWP.

S) Institute a public information program and pursue needed legislation designed to curtail development of chronic bear problem areas via human negligence (including accessibility of bear attractants such as garbage and bulk pet foods).

RATIONALE: Bear depredation (damage) to livestock, agricultural crops, resort establishments, homes and cabins has and will continue to occur, wherever bears and humans coexist. Historically, the solution was to kill offending animals. More recently the preference has been to request that FWP trap the offending animal and move it to another geographic location. This approach of addressing problem bears is extremely time-consuming and expensive and offers limited success (refer to discussion of Element R). Public comment during the scoping process was strongly supportive of preventative strategies as well as holding people accountable for their own actions when living and/or recreating in bear habitat. This element is designed to further emphasize a preventative approach to human/bear conflicts and provide both information and incentive for people

to prevent or eliminate the cause of many chronic human/bear conflicts that arise in bear habitat.

DECISION AUTHORITY: FWP and the Montana Legislature.

T) Work with Animal Damage Control (ADC) to establish a procedure for handling ADC data on depredation complaints and black bear mortalities resulting from control actions.

RATIONALE: This element is intended to foster communication and coordination between FWP and ADC in all areas of the state. Standardized procedures for processing ADC data will promote development of proactive strategies to reduce the incidence of bear depredation; assure that trends in depredation reports are incorporated in population monitoring efforts; and assure that data from animals killed as a result of control actions are considered in assessment of population status and trend.

DECISION AUTHORITY: FWP.

U) Implement regulations requiring mandatory use of the meat of hunter-harvested black bears, while concurrently promoting participation in the trichinella testing service offered by FWP and the Veterinary Molecular Biology Laboratory at MSU.

RATIONALE: This element is designed to discourage waste of usable meat; discourage killing of black bears solely for the purpose of obtaining trophy body parts; and minimize illegal trafficking in bear body parts. Contrary to popular perception of black bears as carnivores, very little of a black bear's diet is comprised of animal tissue (less than 30%). The portion of a bear's diet composed of animal tissue consists largely of insects and includes carrion. The Veterinary Molecular Biology Laboratory at MSU, Bozeman, in conjunction with FWP, provides a meat testing service to successful hunters free of charge. Data from the MSU Veterinary Molecular Biology Laboratory indicate that 15% of black bears harvested in Montana are infected with trichinosis (one out of every 6 or 7 bears tested) (Worley, pers. comm.). Ways to streamline the testing process have been proposed, and will be implemented. While there is some risk of exposure to trichinosis from bear meat, this testing procedure, combined with an informational brochure published by FWP, MSU Veterinary Molecular Biology and the MSU Extension Service (Appendix 11) provide hunters with ample information to avoid Trichinella infection. Use of black bear meat is currently practiced by a majority of Montana black bear hunters. A recent survey of black bear hunters conducted by FWP indicated that 74% of resident and 57% of nonresident hunters use some or all (25% to 100%) of the meat of bears they harvested (Brooks 1993). Implementation of this element would require that Statute 87-3-102 MCA be amended.

This element is not intended to mandate human consumption of black bear meat, but rather use (including pet food, etc.) as opposed to leaving the meat in the field to waste. Mandatory use of bear meat would not apply to carcasses found to be infected with

trichinosis, even though the meat would be rendered safe to consume (by humans or pets) following proper cooking. FWP would advocate testing of the carcass prior to consumption of meat. In addition to addressing ethical and legal issues surrounding disposition of the carcass of harvested wildlife, this element is expected to result in improved public perception and acceptance of black bear hunting.

DECISION AUTHORITY: Requires decisions by the FWP, the FWP Commission and the Montana Legislature.

V) Revise statute 87-3-102 MCA (Waste of Fish or Game).

RATIONALE: Statute 87-3-102 MCA is presented in Appendix 9. This element is intended to prevent bear body parts subject to mandatory inspection (skulls and hides) from being abandoned, disposed of or handled in a manner that renders them unusable for determining sex, age or reproductive status. For example, evidence of lactation (length of mammae) is difficult to determine from a frozen hide - especially if it has been rolled. Statute 87-3-102 MCA was intended primarily to address wastage of meat, rather than body parts subject to mandatory inspection.

FWP proposes that Statute 87-3-102 MCA be revised to: 1) apply to hunters who have harvested or are in the possession of a dead bear or mountain lion; 2) prohibit abandonment or disposal of animal parts required for scientific inspection; 3) require appropriate storage and handling - on the part of the hunter or person in possession - of the skull and hide and any other body part(s) required by FWP or the FWP Commission for scientific inspection; 4) require that body parts required for mandatory inspection be presented to a FWP official within the specified time period after the animal was harvested.

DECISION AUTHORITY: FWP Commission and the Montana Legislature.

W) Revise the legal definition of baiting.

RATIONALE: The statute that is currently applied to cases of illegal baiting is 87-3-101 MCA (Appendix 9), which addresses illegal means of taking game animals and game birds in very broad terms. Interpreted broadly, it is illegal to bait or otherwise attract bears to a location with the aid of food matter - for either hunting or viewing purposes. However, this statute has been found deficient in several prosecutions involving use of illegal baits to kill black bears as well as other wildlife species. FWP proposes that the statute be amended to address baiting in specific terms: 1) what constitutes baiting (carcasses of wild or domestic animals, birds or fish, or portions thereof, vegetables or fruits, garbage, scent substances designed to attract bears or other species) and, 2) use of bait is illegal regardless of who placed it in a particular location. The objective of this element is to improve compliance with, and enforcement of, Montana's current prohibition on use of baits to harvest black bears. This element is not intended to apply

to cover scents, which are commonly used by hunters while hunting black bears and other big game species.

DECISION AUTHORITY: Montana Legislature

X) Clarify Statute 87-3-127 MCA, which provides for use of hounds by FWP employees, ADC personnel and livestock owners to control depredating bears. Revisions would include a provision for agricultural operators to coordinate with FWP and ADC prior to pursuing or killing depredating bears.

RATIONALE: This element is designed to minimize the potential for chronic harassment and/or killing of non-target bears, as well as illegal harvest of bears. In situations where pursuit of depredating bears may present a landowner with lucrative hunting and/or outfitting opportunities, some landowners may be reluctant to practice prevention with regard to bear depredation. Clarification of this statute should eliminate potential conflict of interest and thereby promote use of preventative measures by all livestock producers. In addition to providing protection to non-target bears, the incidence of black bear depredation would be expected to decline. Statute 87-3-127 MCA is presented in Appendix 9.

DECISION AUTHORITY: Montana Legislature.

Y) Work with federal, tribal, state and corporate land management entities to establish a process for cooperatively developing black bear habitat criteria.

RATIONALE: Even though habitat quality is known to influence population density, home range size, growth rates, productivity and survival of black bears, there is no satisfactory direct method of determining habitat quality (LeCount et al 1984). Once developed, habitat criteria could be used in land use planning processes, design and location of habitat enhancement projects, and assessment and monitoring of habitat quality. During the public scoping process, a number of USFS Ranger Districts and timber companies emphasized the importance of this element and expressed a desire to participate in a cooperative effort to develop habitat criteria.

DECISION AUTHORITY: FWP.

Z) Produce an annual, standardized statewide report and analysis of black bear management data, to include: tooth age data, depredation and damage complaint records, ADC control actions, harvest questionnaire information, and wildlife laboratory records.

RATIONALE: Currently, all data on black bears are compiled by administrative region, and presented in eight separate annual regional bear reports. Compilation of black bear data in an annual, statewide report would provide an up-to-date and accessible information base that would serve as a helpful management tool. An annual statewide

report would also facilitate monitoring and evaluation of the state's black bear management program.

DECISION AUTHORITY: FWP.

ELEMENTS INCORPORATED IN THE PROPOSED ACTION AS A RESULT OF COMMENTS RECEIVED DURING THE PUBLIC SCOPING PROCESS:

I) FWP will encourage ADC to assist only those bee keepers who have used proven preventative measures to protect their hives from black bear depredation.

RATIONALE: Several participants in the public scoping process expressed the opinion that bee keepers should be "required" rather than "encouraged" to use preventative measures to protect their bee yards. ADC, rather than FWP generally responds to depredation complaints filed by bee keepers. However, FWP will make fencing materials available to bee keepers and encourage ADC to assist only those bee keepers who use preventative measures.

DECISION AUTHORITY: FWP

II) FWP will maintain bear-proof garbage containers in FWP recreation facilities located in or near black bear habitat and will actively encourage other public agencies and private parties to do the same. In addition to encouraging use of bear-proof garbage receptacles in campground and resort facilities, FWP will encourage use of appropriate preventative measures at land fills located in or near black bear habitat.

RATIONALE: During the public scoping process, several participants suggested that all federal and state campground facilities in or near black bear habitat should be <u>required</u> to install bear-proof garbage containers, and that land fills, resorts and food establishments located in bear habitat should also be required to implement preventative measures to minimize the potential to attract black bears. FWP concurs that use of bear-proof facilities and other preventative practices constitute sensible, responsible management in recreational facilities and land fills. Although FWP currently recommends these preventative actions in chronic problem areas, FWP concurs that they should receive greater emphasis. FWP does not have authority to require any government entity to install bear-proof facilities but agrees to actively encourage other public agencies and private parties to do so.

DECISION AUTHORITY: FWP

III) FWP will explore the potential to initiate a research effort designed to evaluate the of the black bear management targets set forth in Element M.

RATIONALE: A number of participants in the public scoping process questioned the basis on which management targets were established and whether they would be

appropriate or effective here in Montana. Management targets set forth in Element M were derived on the basis of published black bear research projects in North America and reflect professional judgement of experienced bear researchers. FWP will commit to design a research effort to evaluate and refine their use for Montana black bear populations and consider it as part of its biennial budgeting process. Such a study would provide a basis for any needed refinement of black bear management targets outlined in Element M.

DECISION AUTHORITY: FWP

IV. FWP will explore the potential to initiate a research effort designed to facilitate development of habitat criteria referred to in Element Y.

RATIONALE: Participants who commented on Element Y during the public scoping process emphasized the need for more information on black bear habitat requirements prior to developing habitat criteria for use in land management planning. FWP will commit to design a research effort to obtain habitat information that will be needed in the process referred to in Element Y, and consider it as part of its biennial budgeting process.

DECISION AUTHORITY: FWP

ALTERNATIVE 2 (Termination of Spring Hunting)

This alternative consists of Elements B, C, D, E, F, G, H, K, L, M, N, O, Q, R, S, T, U, V, W, X, Y, Z, I, II, III, and IV. This alternative differs from the Proposed Action by the absence of Elements A, I, J and P.

This alternative differs from the Proposed Action in the following ways:

- All spring hunting of black bears would be eliminated (eliminating Elements A and J)
- The start of the fall hunting season would remain as it is now (first Saturday in September) rather than the mid-September opener proposed in Element I
- In the absence of a spring hunting season, Element P would be unnecessary because numbers of orphaned cubs delivered to the FWP shelter would be expected to decline to a level that can be accommodated by the existing facility.

Implementation of Alternative 2 would require FWP to make decisions regarding program direction, procedures and policy and to undertake a formal rule making process that includes provisions for public participation (Table 2). It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

The emphasis of Alternative 2 is elimination of orphaning attributable to hunting mortality of productive females. The alternative also addresses ethical concerns about hunting black bears immediately following emergence from hibernation as well as the potential for grizzly bear mortality attributable to mistaken identity. This alternative would extend to black bears the same protection during the birthing/rearing period currently provided all other big game species in Montana.

ALTERNATIVE 3 (Spring Hunting Regulated by Quota)

This alternative consists of Elements A, B, C, D, E, F, G, H, K, L, M, N, O, Q, R, S, T, U, V, W, X, Y, Z, I, II, III, and IV. This alternative differs from the Proposed Action by the absence of Elements A, I, J and P.

Implementation of Alternative 3 would require FWP to make decisions regarding program direction, procedures and policy and to undertake a formal rule making process that includes provisions for public participation (Table 1). It would also require the FWP Commission to make changes in hunting season format and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

The emphasis of Alternative 3 is protection of the female segment of black bear populations through application of a harvest quota, which would include a female subquota, to the spring hunting season. This approach to regulating hunting harvest has worked satisfactorily in Montana for mountain lions (statewide) and for black bears in southcentral Montana (Region 5).

ALTERNATIVE 4 (No Hunting)

This alternative consists of Elements C, E, F, G, H, K, O, Q, R, S, T, W, X, Y, I, II, III and IV. This alternative differs from the Proposed Action by the absence of Elements A, B, C, D, I, J, L, M, N, P, U, V and Z.

Implementation of Alternative 4 would require FWP to make decisions regarding program direction, procedures and policy and to undertake a formal rule making process that includes provisions for public participation (Table 1). It would also require the FWP Commission to eliminate existing hunting seasons and hunting regulations. In addition, it would require legislative action. This would require FWP to draft a legislative proposal to be submitted to the Montana Legislature.

The emphasis of Alternative 4 is total protection of the state's black bear populations. No black bear hunting would be allowed in the state. Removal of individual bears from the state's bear populations would only occur as a result of control actions arising from depredation complaints.

ALTERNATIVE 5 (No Action)

This alternative consists of Elements A, B, C, D, E, F and G. It differs from the Proposed Action by the absence of Elements H through Z and I - IV.

Implementation of this alternative would not require initiatives such as rule-making on the part of FWP and would only require the FWP Commission make decisions required during the biennial season setting process.

The emphasis of Alternative 5 is to provide public bear hunting opportunity, during both spring and fall hunting seasons. Assuming that hunting pressure will increase over time, it will become increasingly difficult to meet demands for bear hunting opportunity without jeopardizing the state's black bear populations. Declining age structure of harvested bears would be of increasing concern, as well as lack of accurate information on sex of harvested bears. Proper housing, care and disposition of orphaned cubs would continue to be a problem that could conceivably worsen. Without expanded emphasis on hunter education and ethics; efforts to reduce opportunistic bear harvest; greater attention to curtailing illegal activities; and required hunter use of meat of harvested black bears, public perception of black bear hunting would be expected to become increasingly negative. In the absence of information efforts, and consideration of black bear habitat needs by city and county planning boards, human/bear conflicts would be expected to continually increase, coincident with the trend of subdivision development in rural areas of Montana.

ENVIRONMENTAL CONSEQUENCES

ALTERNATIVE 1 (PROPOSED ACTION)

Impacts on black bear populations (total numbers, female composition and orphaning):
Under the Proposed Action, black bear population numbers would be expected to remain near current levels. Several new initiatives would provide greater protection to the female segment of black bear populations, notably a later opening date for the fall hunting season and removal of the black bear license from the sportsman's license. Other provisions, including management targets for harvest composition (Element M) and mandatory hide inspection would provide harvest information that is instrumental in preventing excessive female mortality. As a result of these provisions, the proportion of the state's black bear population comprised of females would be expected to increase and the average age of females would be expected to increase. The incidence of orphaning would be expected to decline as a result of emphasis on improved hunter ethics and minimizing opportunistic harvest of black bears (Element O).

Impacts on black bear habitat: Public concerns about black bear habitat revolve primarily around other land uses occurring in black bear habitat and conversion of bear habitats to rural subdivisions and other human developments. Concern was also voiced

that spring bear hunters damage roads, drive off roads, create new roads and violate road management programs, and that damage caused by such actions is exacerbated by the fact that soils are saturated with moisture in the spring.

FWP acknowledges that conversion of privately owned forested habitats to urban or agricultural uses has and will continue to result in permanent loss of black bear habitat. This impact will occur independently of any of the alterative actions considered in this FEIS. FWP does not have management authority over use of privately owned lands.

The majority of the state's black bear habitat is on public and corporate timber lands, most of which are expected to remain available for use by wildlife. Logging, grazing and other resource developments on private and public lands produce less of an impact on wildlife in the long term than permanent conversion of habitat to other uses. However, the potential does exist for resource development to impact black bear populations in the future. Although FWP does not have management authority over public lands, federal (USFS, BLM) land management planning procedures include formal provisions for FWP to provide input concerning habitat needs of black bears and other wildlife species. Elements Y and IV are specifically designed to improve this process with respect to black bears. Until specific habitat criteria are formally identified, FWP will continue to place emphasis on retention of wet meadows, streamside vegetation, spring foraging areas, and other important components of black bear habitat in its consultations with federal and state land management agencies. Elements G, K and S are also designed to provide the public with information to use in decisions about land use changes and to foster awareness of trade-offs that are made associated with land use decisions. Increased public awareness of black bear habitat requirements would be expected to result in maintenance of some black bear habitats that would otherwise be converted to other uses.

Impacts on hunting opportunity: Hunting opportunity would not be reduced in terms of opportunity to participate, but hunting season length would be reduced a minimum of 10 days. Reduction of season length would be greater than 10 days in hunting units having a spring closing date earlier than May 31. The Proposed Action would provide a maximum season length of 47 days in the spring and 71 days in the fall (118 days total). Provisions for improved hunter ethics, hunting practices (use of bear meat) and public knowledge about black bears and black bear management practices (Elements G, K and S) would be expected to foster improved public perception of black bear hunting, which in turn would likely facilitate continuation of black bear hunting opportunity in the long term.

Impacts on nonconsumptive recreational opportunity: The Proposed Action is not expected to reduce nonconsumptive recreational opportunities. Baseline information on current levels of nonconsumptive recreation use is lacking. Therefore, any potential increase in participation under the Proposed Action is unknown as well.

Impacts on regulation of hunting harvest: The Proposed Action features several initiatives specifically intended to facilitate improved regulation of the hunting harvest, especially harvest of females. Changing hunting season dates to avoid peak vulnerability

periods (Appendix 2 Figs. 8-11) in the spring and fall will have the effect of maintaining greater numbers of adult females in black bear populations. Delineation of new black bear management units (Element H) would help to facilitate regulation of harvest according to local habitat and population factors. Improved data on sex and reproductive status of harvested bears (via mandatory hide inspection) will allow FWP the opportunity to better gauge effects of hunting harvest on bear populations. This information, and management targets outlined in Element M will allow FWP to respond to changes in population trend with adjustments to hunting season regulations, and to do so in a timely fashion if and when such adjustments are warranted.

Impacts on ability to accurately assess and monitor population status and trend: The Proposed Action features several initiatives specifically intended to facilitate improved capability to monitor population and status and trend (skull and hide inspection). Elimination of the black bear license from the sportsman license will result in more accurate information on hunter effort, which indirectly, and in concert with other population indices, will provide information that will be helpful in monitoring population trend.

Impacts on illegal activities: Under the Proposed Action, it is anticipated that the incidence of illegal activities will be reduced. This would be the result of improvements to existing regulations addressing documentation of illegal activities, laws pertaining to proper handling of body parts subject to mandatory inspection, the legal definition of baiting, and use of dogs by livestock operators to control depredating bears. These changes would improve public knowledge of, and compliance with these regulations and would promote more effective enforcement efforts and prosecution of violators. Increased emphasis on hunter ethics (Element L) and mandatory use of meat of harvested bears are also expected to contribute to improved compliance with laws and regulations intended to protect black bear populations from illegal exploitation.

Impacts on local economies: A recent FWP bioeconomics study determined that the total net economic value associated with black bear hunting in Montana is approximately $5,000,000 annually (Brooks 1993). Resident hunters valued their trip at $197 and nonresident hunters valued theirs at $503. The study found that per day expenditures (transportation, food, lodging, equipment and guide fees) average $19.60 per day ($98 per trip) for residents and $137 per day ($826 per trip) for nonresident hunters. These expenditures generate business in local communities, especially in western Montana where densities of black bear hunters are highest. Although data has not been obtained on nonconsumptive bear related recreation in Montana, money generated by these pursuits are thought to be substantial as well. Studies on bear viewing at the McNeil River Sanctuary in Alaska indicate a value of $174 - $300 per person for a four-day permit (Clayton and Mendelsohn 1990, Hill 1988). Under the Proposed Action, impacts to local economies are not anticipated.

Impacts on funding for the black bear management program: The Proposed Action includes a provision to remove the black bear license from the resident sportsman's

license which currently entitles the purchaser to harvest one elk, one deer and one black bear, and entitles the bearer to fish and to hunt upland game birds, all at a cost of $54. Of this $54, $7 is earmarked for the habitat protection program and $2 is earmarked for the upland game bird program. The remaining $45, none of which is earmarked for the black bear management program, is deposited in the general license account. A decline in sales of resident sportsman's licenses would reduce FWP revenues but would not be expected to impact funding for the black bear management program, specifically.

Impacts on the incidence of human/black bear conflicts: Under the Proposed Action, the incidence of nuisance bear complaints (bear/human conflicts) would be expected to decline as the public became more informed as a result of education/information programs outlined in Elements G, K and S. Changes to the statute allowing use of dogs by livestock owners (Element X) would also be expected to result in increased use of preventative measures. The expectation of declining trends in nuisance bear reports and bear depredations (bear/livestock conflicts) is based on the assumption that conversion of black bear habitats will not occur at a magnitude or extent that will counteract benefits of preventative strategies (Elements G, K, S and X).

Impacts on grizzly bear populations: The Proposed Action would not be expected to result in detectable impacts to the state's grizzly bear populations. It does feature several elements that would extend protection to the state's grizzly populations, including: continued prohibition on baits and hounds (Element E), reduction in hunting season length during the height of bear use of berry patches (Element I), greater public awareness of how to prevent human/bear conflicts (Elements K and S), greater emphasis on hunter ethics, including species identification (Element L), and minimizing opportunistic bear harvest that may occur without adequate attention to species identification (Element O). Although the Proposed Action would be expected to improve protection of grizzly bears, grizzly populations are not perceived to be negatively impacted by the existing black bear management program. Therefore, it may not be possible to detect beneficial impacts to grizzly bear populations attributable to provisions of the Proposed Action.

ALTERNATIVE 2 TERMINATION OF SPRING BLACK BEAR HUNTING

This alternative consists of Elements B, C, D, E, F, G, H, K, L, M, N, O, Q, R, S, T, U, V, W, X, Y, Z, I, II, III, and IV. This alternative differs from the Proposed Action by the absence of Elements A, I, J and P.

This alternative differs from the Proposed Action in the following ways:

- All spring hunting of black bears would be eliminated (eliminating Elements A and J)
- The start of the fall hunting season would remain as it is now (first Saturday in September) rather than the mid-September opener proposed in Element I
- In the absence of a spring hunting season, Element P would be unnecessary because numbers of orphaned cubs delivered to the FWP shelter would be expected to decline to a level that can be accommodated by the existing facility.

Impacts on black bear populations (total numbers, female composition and orphaning): Alternative 2 would not be expected to impact bear population levels (refer to discussion of the effects of hunting on black bear mortality on page 52-54). The approximate number of bears currently harvested during the spring season would, under this alternative, be expected to be additive to the anticipated fall bear harvest. Elimination of the spring season would provide protection to females during the period that is currently a peak harvest period (Appendix 2, Figs. 9 and 11). However, females, including subadults, would remain vulnerable to fall hunting pressure during the first two weeks of September. Elimination of the spring season would also minimize orphaning of cubs. Upgrading the FWP animal shelter in Helena for care and holding black bear cubs (Element P) would not be necessary under this alternative.

Impacts on black bear habitat: This alternative is similar to the Proposed Action with respect to provisions for black bear habitat. As in the Proposed Action, Elements G, K and S would provide the public with information to use in decisions about land use changes and to foster awareness of trade-offs that are associated with land use decisions. Increased public awareness of black bear habitat requirements would be expected to result in maintenance of some black bear habitats that would otherwise be converted to other uses. Elements Y and IV would be expected to improve the effectiveness of land use planning with regard to black bear habitat.

Indirectly, this alternative does address public concerns about spring damage to roads, damage resulting from off-road travel and violations of road management programs (refer to discussion on page 54). But it is not known to what degree spring use of roads on public and private lands would be affected by the elimination of the spring black bear season.

Impacts on hunting opportunity: Under this alternative, opportunity to hunt bears in the spring would be eliminated. Elimination of the spring season would result in a 47-day reduction from current hunting season length. The fall hunting season (first week of September to the end of the general game season) would remain 86 days in length. Provisions for improved hunter ethics (Element L), hunting practices (use of bear meat) and public knowledge about black bears and black bear management practices (Elements G, K and S) would be expected to foster improved public perception of black bear hunting, which in turn would likely facilitate continuation of hunting opportunity in the long term.

Impacts on nonconsumptive recreational opportunity: Under this alternative, nonconsumptive recreational opportunities would be expected to remain at current levels or increase somewhat. It is possible that participation in nonconsumptive bear-related activity would increase in the spring, in the absence of a spring hunting season. Due to lack of information on current participation in nonconsumptive forms of bear-related recreation, the magnitude of potential increase is unknown.

Impacts on regulation of hunting harvest: Unlike the Proposed Action, this alternative does not eliminate fall hunting during the peak period of fall bear vulnerability (the first two weeks of September). However, the other provisions of the Proposed Action that address regulation of hunting harvest are included in this alternative. Improved data on sex and reproductive status of harvested bears (via mandatory hide inspection) will allow FWP the opportunity to better gauge effects of hunting harvest on bear populations. This information, and management targets outlined in Element M will allow FWP to respond to changes in population trend with adjustments to hunting season regulations, and to do so in a timely fashion if and when such adjustments are warranted. Delineation of new black bear management units (Element H) also facilitate regulation of harvest according to local habitat and population factors.

Impacts on ability to accurately assess and monitor population status and trend: Like the Proposed Action, Alternative 2 includes a number of provisions specifically intended to facilitate improved capability to monitor population and status and trend (skull and hide inspection). Elimination of the black bear license from the sportsman license will result in more accurate information on hunter effort, which indirectly, and in concert with other population indices, provides valuable information on population trend.

Impacts on illegal activities: This alternative is identical to the Proposed Action with regard to provisions for improved compliance with, and enforcement of, laws designed to protect black bear populations. Like the Proposed Action, the incidence of illegal activities would therefore be expected to decline. However, in the absence of a spring season, nuisance bear complaints and the incidence of bear depredation would be expected to increase. One potential result could be reduced tolerance for black bears on the part of some people, and an increase in illegal killing of nuisance or depredating bears.

Impacts on local economies: A recent FWP bioeconomics study determined that the total net economic value associated with black bear hunting in Montana is approximately $5,000,000 annually (Brooks 1993). Resident hunters valued their trip at $197 and nonresident hunters valued theirs at $503. The study found that per day expenditures (transportation, food, lodging, equipment and guide fees) average $19.60 per day ($98 per trip) for residents and $137 per day ($826 per trip) for nonresident hunters. Much of this money generates business in local communities, most benefitting communities in western Montana where densities of black bear hunters are highest. Under this alternative, the economic stimulus that occurs coincident with spring bear hunting activity would be eliminated. However, a portion of that loss would be expected to be replaced during the fall hunting season.

While data has not been obtained on nonconsumptive bear related recreation in Montana, the economic benefits of these pursuits are thought to be substantial as well. Studies on bear viewing at the McNeil River Sanctuary in Alaska indicate a value of $174 - $300 per person for a four-day permit (Clayton and Mendelsohn 1990, Hill 1988). Under this

alternative, some increases in spring bear watching might be anticipated, but levels of participation and potential economic ramifications of that activity are not known.

Impacts on funding for the black bear management program: This alternative is not expected to result in an appreciable decline in hunting license revenues. This is based on the assumption that most bear hunters will hunt in the fall instead of the spring, if the spring hunting season is eliminated.

Impacts on the incidence of human/black bear conflicts: Elimination of the spring hunting season would be expected to result in increased numbers of nuisance bear (bear/human conflicts) complaints and an increased incidence of black bear depredation (bear/livestock conflicts) during summer months. Some black bears, typically male adults and subadults, tend to "get into trouble" in the spring and late summer. It has generally been assumed that in the absence of hunting harvest, some of these animals would likely become the object of FWP trapping and relocation efforts or ADC control actions. It has also been long assumed that removal of adult males during a spring hunting season (Appendix 2 Figure 4 and 8) substantially reduces the effort that would otherwise be required to address problem bear complaints occurring throughout the year.

Impacts on grizzly bear populations: Alternative 2 would not be expected to result in detectable impacts to the state's grizzly bear populations or other wildlife species. Although elimination of the spring hunting season under this alternative would be expected to enhance protection of grizzly bears, there is no evidence that the existing spring hunting season is detrimental to grizzly populations (Dood and Pac 1993). Like the Proposed Action, this alternative features several elements that would extend protection to the state's grizzly populations, including: continued prohibition on baits and hounds (Element E), greater public awareness of how to prevent human/bear conflicts (Elements K and S), greater emphasis on hunter ethics, including species identification (Element L), and minimizing opportunistic bear harvest that may occur without adequate attention to identification of species (Element O). Although these provisions of Alternative 2 would be expected to improve protection of grizzly bear populations, grizzly populations are not perceived to be negatively impacted by the existing black bear management program. Therefore, it may not be possible to detect beneficial impacts to grizzly bear populations due to provisions of this alternative.

ALTERNATIVE 3 FALL HUNTING SEASON AND A SPRING HUNTING SEASON REGULATED BY QUOTA

This alternative consists of Elements A, B, C, D, E, F, G, H, K, L, M, N, O, Q, R, S, T, U, V, W, X, Y, Z, I, II, III, and IV. This alternative differs from the Proposed Action by the absence of Elements A, I, J and P.

The emphasis of Alternative 3 is protection of the female segment of black bear populations through application of a harvest quota, which would include a female subquota, to the spring hunting season. This approach to regulating hunting harvest has

worked satisfactorily in Montana for mountain lions (statewide) and for black bears in southcentral Montana (Region 5). Use of harvest quotas in Region 5 was prompted by harvest levels, especially of adult females, that were deemed to be excessive. Quotas were implemented in 1987 following unsuccessful attempts to reduce hunter harvest by reducing hunting season length. The quota system in Region 5 reduced total hunting mortality by 55.6% during the years 1987-1991. Mortality of marked bears declined from 16% pre-quota to 12% post-quota. Use of a quota system was supported by participants in the public scoping process, as well as respondents to a recent FWP survey of black bear hunters (Brooks 1993).

Impacts on black bear populations (total numbers, female composition and orphaning): Under Alternative 3, black bear population numbers would be expected to remain at current levels (refer to discussion of the effects of hunting on mortality, pages 52-54). Application of harvest quotas to the spring season would be intended to protect the female segment of black bear populations from overharvest. Several new initiatives (also featured in the Proposed Action) would provide additional protection to the female segment of black bear populations, notably removal of the black bear license from the sportsman's license. Unlike the Proposed Action, the opening date of the fall hunting season would remain unchanged. Other provisions, including management targets for harvest composition (Element M) and mandatory hide inspection will provide harvest information that is instrumental in gauging harvest to prevent excessive female mortality. As a result of all of these provisions, a greater proportion of the state's black bear populations would be expected to be comprised of females and the average age of females would be expected to increase. The incidence of orphaning would be expected to decline as a result of female subquotas as well as emphasis on improved hunter ethics and curtailing opportunistic harvest of black bears (Element O). Quotas addressing orphaned cubs could also conceivably be incorporated into a quota system. One potential drawback to broad-based application of quotas to regulate hunting harvest is the tendency for some hunters to become less selective in choosing an animal to harvest, for fear that the season will close (prompted by a filled quota) before they have another opportunity. This scenario has been noted by wildlife managers in management of a variety of species. Competitive human impulses would be expected to be most accentuated in situations characterized by heavy hunting pressure and expectations of a short hunting season. This alternative could potentially backfire with respect to accomplishing a more selective harvest in terms of species, sex and reproductive status.

Impacts on black bear habitat. This alternative is similar to the Proposed Action with respect to provisions for black bear habitat. As in the Proposed Action, Elements G, K and S would provide the public with information to use in decisions about land use changes and to foster awareness of trade-offs that are associated with land use decisions. Increased public awareness of black bear habitat requirements would be expected to result in maintenance of some black bear habitats that would otherwise be converted to other uses.

Elements Y and IV would be expected to improve the effectiveness of land use planning with regard to black bear habitat.

Impacts on hunting opportunity: Hunting opportunity would not be reduced in terms of opportunity to participate. But attainment of harvest quotas, including female subquotas, could limit spring hunting opportunity as a result of early closures. Spring closures would be expected to occur earliest in bear management units that are very accessible and/or where security cover is limited. Provisions for improved hunter ethics (Element L), hunting practices (use of bear meat) and public knowledge about black bears and black bear management practices (Elements G, K and S) would be expected to foster improved public perception of black bear hunting, which in turn would likely facilitate continuation of hunting opportunity in the long term.

Impacts on nonconsumptive recreational opportunity: Alternative 3 is not expected to reduce nonconsumptive recreational opportunities. Baseline information on current levels of nonconsumptive recreation use is lacking. Therefore, potential increase in participation under this alternative is unknown as well.

Impacts on regulation of hunting harvest: This alternative features several initiatives specifically intended to facilitate improved regulation of the hunting harvest, especially harvest of females. The most obvious is use of a quota system that would prompt closure of the hunting season when a maximum allowable total harvest, or female harvest, is attained. Delineation of new black bear management units (Element H) would facilitate development of quotas for various bear populations according to local habitat and population factors. Improved data on sex and reproductive status of harvested bears (via mandatory hide inspection) will also allow FWP the opportunity to better gauge effects of hunting harvest on bear populations. This information, and management targets outlined in Element M will allow FWP to respond to changes in population trend with appropriate adjustments to hunting season regulations, and to do so in a timely fashion if and when such adjustments are warranted.

Impacts on ability to accurately assess and monitor population status and trend: Like the Proposed Action, this alternative features several initiatives specifically intended to facilitate improved capability to monitor population and status and trend (skull and hide inspection). Elimination of the black bear license from the sportsman license will result in more accurate information on hunter effort, which indirectly, and in concert with other population indices, would provide valuable insight to population trend.

Impacts on illegal activities: Under Alternative 3, it is anticipated that the incidence of illegal activities would be reduced. This would be the result of improvements to existing regulations addressing documentation of illegal activities, laws pertaining to proper handling of body parts subject to mandatory inspection, the legal definition of baiting, and use of dogs by livestock operators to control depredating bears. These changes would improve public knowledge of, and compliance with these regulations and would promote more effective enforcement and prosecution of violators. Increased emphasis on hunter

ethics (Element L) and mandatory use of meat of harvested bears are also expected to contribute to improved compliance with laws and regulations intended to protect black bear populations from illegal exploitation.

Impacts on local economies: A recent FWP bioeconomics study determined that the total net economic value associated with black bear hunting in Montana is approximately $5,000,000 annually (Brooks 1993). Resident hunters valued their trip at $197 and nonresident hunters valued theirs at $503. The study found that per day expenditures (transportation, food, lodging, equipment and guide fees) average $19.60 per day ($98 per trip) for residents and $137 per day ($826 per trip) for nonresident hunters. Much of this money generates business in local communities, most benefitting communities in western Montana where densities of black bear hunters are highest. While data has not been obtained on nonconsumptive bear related recreation in Montana, money generated by these pursuits are thought to be substantial as well. Studies on bear viewing at the McNeil River Sanctuary in Alaska indicate a value of $174 - $300 per person for a four-day permit (Clayton and Mendelsohn 1990, Hill 1988). Under this alternative, impacts to local economies are not expected to occur.

Impacts on funding for the black bear management program: Like the Proposed Action, Alternative 3 includes a provision to remove the black bear license from the resident sportsman's license which currently entitles the purchaser to harvest one elk, one deer and one black bear, and entitles the bearer to fish and to hunt upland game birds, all at a cost of $54. Of this $54, $7 is earmarked for the habitat protection program and $2 is earmarked for the upland game bird program. The remaining $45, none of which is earmarked for the black bear management program, is deposited in the general license account. A decline in sales of resident sportsman's licenses would reduce FWP revenues but would not be expected to impact funding for the black bear management program, specifically.

Impacts on the incidence of human/black bear conflicts: Under Alternative 3 the incidence of nuisance bear complaints (bear/human conflicts) would be expected to decline as the public became more informed as a result of education/information programs outlined in Elements G, K and S. Changes to the statute allowing use of dogs by livestock owners (Element X) would also be expected increase use of preventative measures. The expectation of declining trends in nuisance bear reports and the incidence of bear depredation (bear/livestock conflicts) is based on an assumption that conversion of black bear habitats will not occur at a magnitude or an extent that will counteract benefits of preventative strategies outlined in this alternative.

Impacts on grizzly bear populations: Alternative 3 would not be expected to result in detectable impacts to the state's grizzly bear populations or other wildlife species. Like the Proposed Action, this alternative features several elements that would extend protection to the state's grizzly populations, including: continued prohibition on baits and hounds (Element E), greater public awareness of how to prevent human/bear conflicts (Elements K and S), greater emphasis on hunter ethics, including species identification

(Element L), and minimizing opportunistic bear harvest that may occur without adequate attention to identification of species (Element O).

Although these provisions of Alternative 3 would be expected to improve protection of grizzly bear populations, grizzly populations are not perceived to be negatively impacted by the existing black bear management program. Therefore, it may not be possible to detect beneficial impacts to grizzly bear populations due to provisions of this alternative.

ALTERNATIVE 4 TERMINATION OF ALL BLACK BEAR HUNTING

This alternative consists of Elements C, E, F, G, H, K, O, Q, R, S, T, W, X, Y, I, II, III, and IV. This alternative differs from the Proposed Action by the absence of Elements A, B, C, D, I, J, L, M, N, P, U, V and Z.

Impacts on black bear populations (total numbers, female composition and orphaning: In the absence of hunting, the size and composition of black bear populations would be regulated by natural mortality factors, as discussed on pages 44 - 45. Black bear populations would not be expected to increase dramatically in the long term because the state's black bear population is thought to be near or at the capacity of available habitat. However, significant increases could occur in the short term and greater fluctuations in total bear numbers would be expected to occur in response to year-to-year variation in forage availability, primarily mast crops. In good forage years, more young bears would survive thereby increasing total population numbers until poor forage conditions occur, causing a portion of the population to die as a result of food shortages.

Populations would be comprised of older bears - the average age would increase for males as well as females. Concurrently, survival rates of young bears would decline, largely a result of the influence of greater numbers of older, adult males. Adult males tend to kill subadults in dense populations (Jonkel and Cowan 1971, Kemp 1972, Poelker and Hartwell 1973, and Kemp 1977). The majority of this mortality occurs after the cubs separate from the adult female at 14-16 months of age (Elowe and Dodge 1989). An unhunted black bear population in Arizona demonstrated a low percentage of subadults and a high mean age (LeCount 1982a, 1982b, 1987). In addition, every adult male had neck scars and lacerations, also indicative of high numbers of older males in an unhunted population. Under this alternative, survival of young bears would increase only if additional habitat is available, or habitat conditions have improved enough to support additional animals. In the absence of spring hunting, the incidence of orphaning would be minimal.

Impacts on black bear habitat: This alternative is similar to the Proposed Action with respect to provisions for black bear habitat. As in the Proposed Action, Elements G, K and S would provide the public with information to use in decisions about land use changes and to foster awareness of trade-offs that are associated with land use decisions. Increased public awareness of black bear habitat requirements would be expected to result

in maintenance of some black bear habitats that would otherwise be converted to other uses. However, it is possible that the public would place less value on black bear populations and the habitats they depend upon if bear numbers were considered excessive or lack of wariness toward humans resulted in public perception of black bears as pests. Elements Y and IV would be expected to improve the effectiveness of land use planning with regard to black bear habitat.

Periodic black bear population "highs" that could potentially occur in the absence of a hunting season would not result in detrimental impacts to black bear habitats. Unlike some other wildlife species, black bear populations are not capable of over-using and damaging the food sources they rely upon. In years that staple bear foods are inadequate, some bears would become malnourished and/or seek out "unnatural" food sources. Malnourishment would result in higher mortality rates.

Impacts on hunting opportunity: Hunting opportunity would be eliminated under Alternative 4.

Impacts on nonconsumptive recreational opportunity: Nonconsumptive recreational opportunity would be expected to increase substantially, especially as black bears become less wary of humans and frequent more accessible areas, including the vicinity of human dwellings. At some point, habituation of black bears to humans could potentially result in human safety issues for people pursuing viewing and photography opportunities in close proximity to bears.

Impacts on regulation of hunting harvest: Not applicable to this alternative because hunting harvest would be totally eliminated.

Impacts on ability to accurately assess and monitor population status and trend: Most data used to monitor population status and trend of black bear populations is derived from hunter harvested bears (sex and age distribution) as well as indices involving hunting pressure (total numbers of hunters, average success rates, trends in hunter effort per bear harvested, etc.). In the absence of information from dead bears, population trend could be monitored for some local bear populations that lend themselves to some degree of ground or aerial surveys, and possibly thorough trends in numbers of nuisance bear complaints, depredation reports and FWP and ADC control actions. There is some question whether there would be a need or demand for continued population monitoring in the absence of hunting. If that need were established, new funding sources would have to be developed to accomplish marking and monitoring of marked bears.

Impacts on illegal activities: Alternative 4 includes Elements designed to improve compliance with, and enforcement of regulations designed to protect black bear populations. However, the incidence of illegal activities would be expected to increase under this alternative. In the absence of hunting, black bear numbers could periodically reach levels perceived by some people to be excessive. For a portion of the public, this would have the effect of reducing the existence value of black bears and increase the

incidence of illegal killing. Such actions would be prompted by reduced tolerance of bears, annoyance with nuisance or problem bears and participation in illegal trade in black bear body parts. All of these practices would be expected to escalate as bears lose their wariness and become increasingly habituated to humans. Illegal exploitation of black bear populations would likely not be judged by the public as harshly as it is now - if public perception of black bears is that of "pests" rather than an asset.

Impacts on local economies: Dollars generated in local communities as a result of hunting activity would be eliminated. Participation in nonconsumptive recreational activities would be expected to increase under this alternative. It is assumed that dollars previously generated by hunters would be partially supplanted by expenditures of nonconsumptive receptionists. But in the absence of baseline information on participation rates in nonconsumptive bear-related recreation and expenditures of nonconsumptive recreationists, it is not possible to make meaningful predictions.

Impacts on funding for the black bear management program: The overall costs of black bear management under this alternative would at first glance be expected to be significantly less than the other, hunting alternatives. However, this alternative would be expected to require substantial expenditures associated with responding to nuisance and problem bear complaints, trapping and relocating problem bears, and conducting control actions. The resources (personnel and operations) required to conduct these efforts would be expected to be substantial. In the absence of revenues from black bear hunting license sales, the black bear management program would be subsidized by revenues from other kinds of hunting licenses.

Impacts on the incidence of human/black bear conflicts: The incidence of nuisance bear complaints (bear/human conflicts) and depredation reports (bear/livestock conflicts) would be expected to increase under this alternative. An increased role by ADC in responding to bear depredation would be anticipated. This would be the result of pressures exerted on dispersing subadults by older, larger bears, resulting in a greater number of younger bears becoming nuisance or depredating bears in their quest for living space and food. This would be especially prevalent in years characterized by poor mast crops.

Impacts on grizzly bear populations: Alternative 4 would not be expected to result in detectable impacts to the state's grizzly bear populations or other wildlife species. Although elimination of black bear hunting under this alternative would be expected to enhance protection of grizzly bears, there is no evidence that the existing hunting season is detrimental to grizzly populations. Like the Proposed Action, this alternative features several elements that would extend protection to the state's grizzly populations, including: continued prohibition on baits and hounds (Element E), reduction in hunting season length during the height of bear use of berry patches (Element I), greater public awareness of how to prevent human/bear conflicts (Elements K and S), greater emphasis on hunter

ethics, including species identification (Element L), and minimizing opportunistic bear harvest that may occur without adequate attention to identification of species (Element O).

Although these provisions of Alternative 4 would be expected to improve protection of grizzly bear populations, grizzly populations are not perceived to be negatively impacted by the existing black bear management program. Therefore, it may not be possible to detect beneficial impacts to grizzly bear populations due to provisions of this alternative.

Potentially, this no-hunting alternative could be less favorable to grizzly bear populations than regulated hunting as provided by Alternatives 1, 2 and 3. Some bear researchers have speculated that high black bear densities in areas where black bear distribution and grizzly bear distribution overlap could cause suppression of grizzly bear population growth as a result of competition between adult black bears and subadult grizzly bears. While there is no data to support or discount this hypothesis, this scenario could be a potential outcome of this alternative.

ALTERNATIVE 5 NO ACTION (status quo)

This alternative consists of Elements A, B, C, D, E, F and G. This alternative differs from the Proposed Action by the absence of Elements H through Z and I - IV.

Impacts on black bear populations (total numbers, female composition and orphaning): Black bear population numbers would be expected to remain at current levels in the short term. However, in the absence of safeguards designed to prevent excessive harvest, especially of females, bear numbers would be expected to decline over time as hunting pressure increases (refer to discussion of hunting mortality, pages 52 - 54). Population declines would probably first become evident in black bear habitats highly accessible by road and/or trail and offering limited security cover. Assuming that hunting pressure would increase over time, females would be expected to comprise an increasing proportion of the harvest, and a correspondingly smaller proportion of black bear populations. The average age of females in the harvest would decline, corresponding to a declining average age of females in the population. The incidence of orphaning would be expected to remain at existing levels in the short term and possibly increase in the long term as hunting pressure increases.

Impacts on black bear habitat: Alternative 5 does not include any of the public information initiatives featured by other alternatives (Elements G, K and S), nor Elements Y and IV which address direct collection of habitat data. Of all the alternatives, this one is the least likely to have any effect on current habitat trends.

Impacts on hunting opportunity: Both hunting opportunity and hunting pressure would be expected to remain the same in the short term. In the long term, hunting pressure would be expected to increase, especially among nonresidents, coincident with increasing restriction of black bear hunting opportunities in other western states. Eventual reductions in hunting season length and other restrictions would become inevitable. In

the absence of other strategies addressing regulation of harvest, eventual reductions in season length would likely be substantial. In the long term, it is anticipated that sport hunting of black bears in Montana would come under increasing public scrutiny and that anti-hunting sentiment would increase over time. This assumption is based on public comment during the scoping process. Participants in the scoping process expressed strong support for Elements of the Proposed Action that are designed to protect black bear populations from excessive harvest. In the absence of initiatives reflecting current knowledge of black bear management, legal challenge of the black bear management program would be anticipated as well.

Impacts on nonconsumptive recreational opportunity: Opportunities for nonconsumptive recreational opportunity would be expected to remain unchanged in the long term. However, if populations declined in the long term as a result of excessive harvest, nonconsumptive recreational opportunity would be expected to decline proportionately.

Impacts on regulation of hunting harvest: The ability of FWP to regulate hunting harvest, and therefore respond to changes in population status and trend, would remain unchanged from current conditions in both the short- and long-term. This would present a problem as hunting pressure increased, and if hunting harvest were to increasingly impact sex and age composition of black bear populations, as well as total numbers of black bears harvested.

Impacts on ability to accurately assess and monitor population status and trend: The ability of FWP to accurately assess and monitor population status and trend would be expected to remain unchanged in the short term. This would be of concern to managers because widely accepted population indicators suggest that Montana black bear harvest is currently at or near thresholds that may warrant corrective action (percentage of harvest comprised by females, average age of harvested females). This dilemma would be of increasing concern as hunting pressure increased over time.

Impacts on illegal activities: The incidence of illegal activities would be expected to remain the same in the short term, in the absence of preventative measures included in the other alternatives (Elements Q, U, V, W and X). In the absence of disincentives, illegal activities would be expected to increase in the long term, especially if the black market for black bear body parts continues to be lucrative.

Impacts on local economies: Dollars generated by hunter activity in local communities would be expected to remain at current levels in the short term. Population declines and resulting impacts on hunting harvest and impact economics of local communities in the long term.

Impacts on funding for the black bear management program: Funds generated by license sales would be expected to remain at current levels.

Impacts on the incidence of human/black bear conflicts: In the absence of public information initiatives, the incidence of human/bear conflicts would be expected to continue to increase. FWP personnel would continue to spend an increasing portion of their time and operations budgets responding to nuisance bear complaints and requests that bears removed from the vicinity of peoples' homes. As more and more black bear habitat is converted to rural subdivisions and other human uses, public tolerance for black bear numbers would be expected to decline as a result of increased incidence of human/bear conflicts.

Impacts on grizzly bear populations: Analysis of the dynamics of Montana grizzly bear populations has not revealed impacts to grizzly populations attributable to the state's existing black bear management program. Of all the alternatives considered in this analysis, this one provides the least protection to grizzly populations. In the long term, continuation of the existing black bear management program could potentially result in impacts to grizzly populations if hunting pressure were to increase substantially without adoption of initiatives that extend protection to grizzly bears.

COMPARISON OF ALTERNATIVES

Comparison of the five alternative Actions, with regard to the eleven issues/impacts of primary concern is displayed in Table 3.

ALTERNATIVE 1 (Proposed Action)

Under the Proposed Action, potential impacts to black bear populations would be expected to be minor in the short term, but significant in the long term. Conservative harvest of female bears and maintenance of a productive age structure are expected long-term impacts of this alternative. A reduced incidence of orphaning would not significantly impact black bear populations but would contribute to a responsive management program. Likewise, this alternative would be expected to significantly impact the ability of FWP to assess and monitor population status and trend and to regulate annual hunting harvest.

The Proposed Action may result in potentially significant impacts on the incidence of human/bear conflicts as well as the incidence of illegal activities. This alternative is designed to reduce occurrence of both, but the magnitude of potential change is unknown.

The Proposed Action is not expected to impact air quality, water quality, soil or other geological features. Neither is this alternative expected to impact terrestrial and aquatic life, and their habitats, or vegetation cover. Impacts to bear-related recreational opportunities, both hunting and nonhunting, would not be expected to occur. This alternative is not expected to result in impacts on local economies or funding for the state's black bear management program.

ALTERNATIVE 2 (Termination of Spring Black Bear Hunting)

Like the Proposed Action, Alternative 2 would be expected to result in potentially significant impacts to black bear populations in the long term. Conservative harvest of female bears and maintenance of a productive age structure are expected long-term impacts of Alternative 2. A minimal incidence of orphaning would not significantly impact black bear populations but would contribute to a responsive management program. Similar to the Proposed Action, Alternative 2 would be expected to significantly impact the ability of FWP to assess and monitor population status and trend and to regulate annual hunting harvest.

Alternative 2 could result in potentially significant impacts on the incidence of human/bear conflicts. Elimination of the spring hunting season could potentially result in increased incidence of bear depredation and nuisance bear complaints, but the magnitude and extent of potential increase is unknown. It is anticipated that the incidence of illegal activities could also potentially increase in the absence of a spring hunting season but it is not known if such an increase would be significant.

Implementation of Alternative 2 would result in impacts to bear-related recreation. Spring bear hunting opportunity would be significantly impacted (eliminated) but significant impacts to nonhunting forms of recreation would not be expected to occur. Alternative 2 would result in loss of dollars generated in local communities as a result of spring bear hunting activity, which could constitute a potentially significant impact in some western Montana communities if money generated by fall hunting activity did not increase proportionately.

This alternative would not be expected to result in impacts on funding for the state's black bear management program. Alternative 2 is not expected to impact air quality, water quality, soil or other geological features. Neither is this alternative expected to impact terrestrial and aquatic life, and their habitats, or vegetation cover.

ALTERNATIVE 3 (Fall Hunting Season and a Spring Hunting Season Regulated by Quota)

Like the Proposed Action, Alterative 3 would be expected to result in potentially significant impacts to black bear populations in the long term. Conservative harvest of female bears and maintenance of a productive age structure are expected long-term impacts of Alternative 3. However, there is a potential for this alternative to backfire with respect to achieving a more selective harvest with respect to species, sex and reproductive status (refer to discussion on page 57). Potential reduction of the incidence of orphaning would not significantly impact black bear populations but would contribute to a responsive management program. Similar to the Proposed Action, Alternative 3 would be expected to significantly impact the ability of FWP to assess and monitor population status and trend and to regulate annual hunting harvest. Alternative 3 could result in potentially significant impacts on the incidence of human/bear conflicts as well

as the incidence of illegal activities. This alternative is designed to reduce occurrence of both, but the magnitude of potential change is unknown.

Alternative 3 is not expected to impact air quality, water quality, soil or other geological features. Neither is this alternative expected to impact terrestrial and aquatic life, and their habitats, or vegetation cover. Significant impacts to bear-related recreational opportunities, both hunting and nonhunting, would not be expected to occur. This alternative is not expected to result in impacts on local economies or funding for the state's black bear management program.

ALTERNATIVE 4 No Black Bear Hunting

Alternative 4 would be expected to result in potentially significant impacts to black bear populations in the long term. Lack of hunting harvest would be expected to result in significant changes in population dynamics, including changes in average age (which would be expected to increase) and cub and subadult survival rates (which would be expected to decline). Absence of hunting harvest would significantly impact (reduce) the kinds and amount of biological data available for use in population assessment and trend monitoring.

Alternative 4 could result in potentially significant impacts on the incidence of human/bear conflicts as well as the incidence of illegal activities, both of which would be expected to increase. The potential magnitude of such changes are not known.

Alternative 4 is not expected to impact air quality, water quality, soil or other geological features. Neither is this alternative expected to impact terrestrial and aquatic life, and their habitats, or vegetation cover. Hunting opportunity would be significantly impacted (eliminated) by this no-hunting Alternative. Although nonhunting recreational opportunity would be expected to increase, the magnitude and extent of such change is unknown. Elimination of black bear hunting activity would be expected to impact economies of some western Montana communities, some of which might be affected significantly. Elimination of black bear license revenues would constitute a significant impact on funding of the state's black bear management program.

ALTERNATIVE 5 No Action

Alternative 5 would not be expected to result in impacts to black bear populations in the short term, but long-term impacts would be expected to be potentially significant. Assuming that hunting pressure will increase over time, mean age of harvested bears would be expected to further decline. Overharvest could occur, resulting in an eventual population decline. The proportion of females in the current harvest may be too high to sustain black bear populations at current levels. Impacts on the ability of FWP to assess and monitor population status and trend, and to regulate annual hunting harvest would not occur. The current data base on black bear populations is limited. Under this

alternative, available biological data on black bears, including sex composition of harvested bears, would not be improved.

Alternative 5 would not be expected to impact the incidence of human/bear conflicts, illegal activities, hunting and nonhunting forms of bear-related recreation, economies of local communities or funding for the bear management program.

Alternative 5 would not be expected to impact air quality, water quality, soil or other geological features. Neither is this alternative expected to impact terrestrial and aquatic life, and their habitats, or vegetation cover.

OTHER AGENCIES THAT HAVE JURISDICTION OR RESPONSIBILITY

U.S. Dept. of Agriculture, Animal and Plant Health Inspection Service (APHIS): Animal Damage Control (ADC)

DESCRIPTION OF OTHER PERTINENT ENVIRONMENTAL REVIEW DOCUMENT

Final Programmatic Environmental Impact Statement: The grizzly bear in northwestern Montana (Dood, A.R.,R. Brannon, and R.Mace). 1986
Montana Department of Fish, Wildlife and Parks
P.O.Box 200701
Helena, MT 59620-0701

Five Year Update of the Programmatic Environmental Impact Statement: The Grizzly Bear in Northwestern Montana (Dood and Pac). 1993
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

Bear Hunting: Final Environmental Document
California Department of Fish and Game
April 23, 1992

Black Bear Management Plan, 1992-2000 August 1992
Idaho Department of Fish and Game
600 South Walnut Street, P.O. Box 25
Boise, Idaho 83707

Management Plan for Black Bears in Alberta June 1993
Environmental Protection, Fish and Wildlife Services
Petroleum Plaza, 9945-108 Street
Edmonton, Alberta, Canada T5K 2G6

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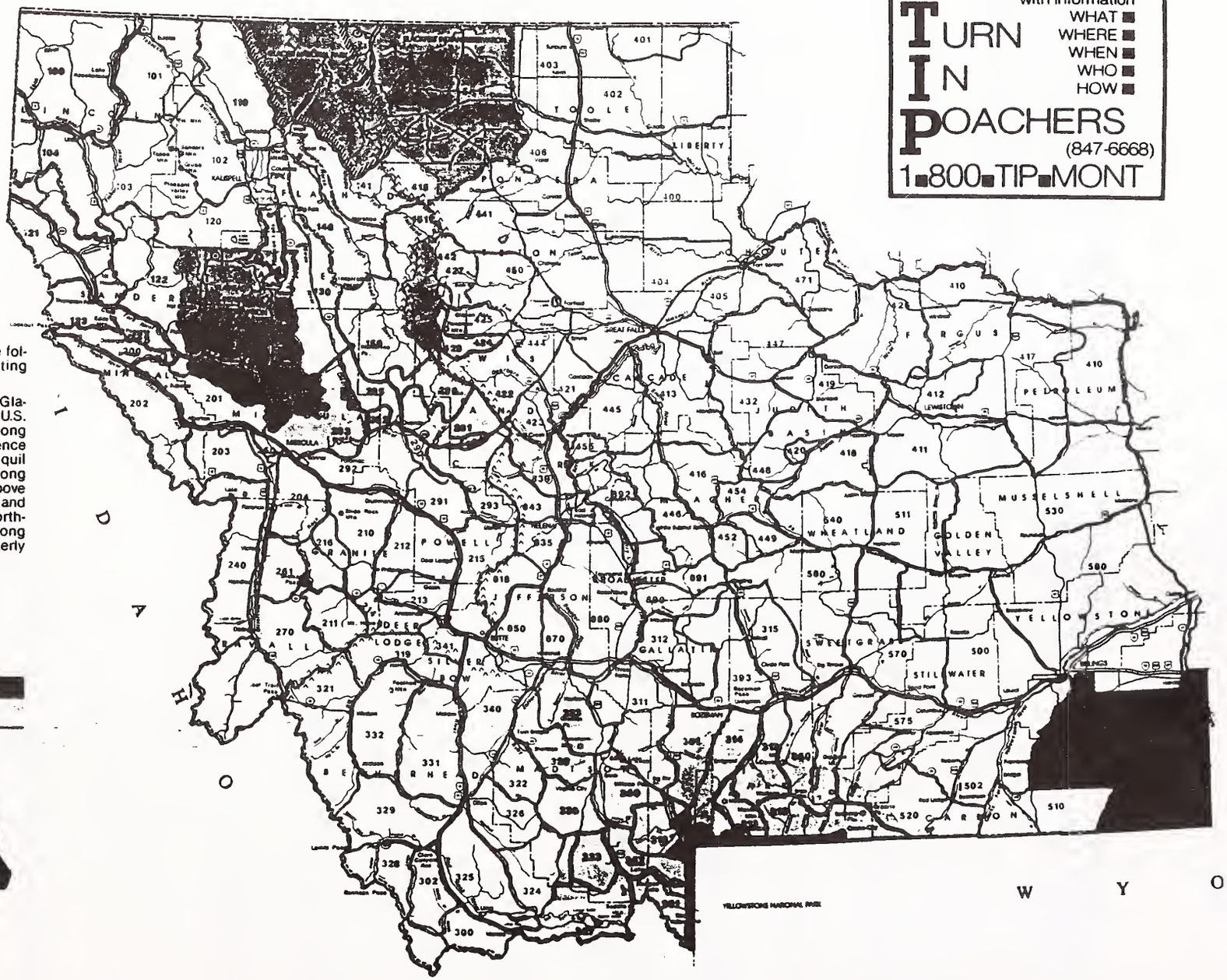
BLACK BEAR HUNTING DISTRICTS

CLOSED TO ALL BEAR HUNTING

GENERAL RANGE OF GRIZZLIES IN MONTANA



TIP POACHERS
with information
WHAT
WHERE
WHEN
WHO
HOW
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1-800-TIP-MONT

NOTICE OF BLACK BEAR CLOSURE
Portion of Hunting District 141

By order of the Montana Fish, Wildlife and Parks Commission, the following described area in Flathead County shall be closed to all hunting of black bear.

Beginning at the Java railroad trestle crossing U.S. Highway 2 at the Glacier National Park entrance, thence easterly along U.S. Highway 2 to U.S. Forest Service trail number 155 (Big River trail), thence southerly along said trail to trail number 489 (Edna Creek - Tranquil Basin trail), thence easterly along said trail to the divide between Spruce Creek and Tranquil Basin, thence easterly along said divide and continuing easterly along the divide between Devil, Moose, Goat, and Lynx creeks to a point above Geifer Lake, thence northerly along the divide between Devil Creek and Grizzly Creek to U.S. Highway 2 at the Geifer Creek bridge, thence northeasterly along said highway to the Fielding Road, thence northerly along said road to the Glacier National Park boundary, thence southwesterly along said boundary to the point of beginning.

BEAR HUNTERS—Know Your Target!

Look for a combination of characteristics

Color and size are sometimes misleading

General Regulations

Sale of Game Parts — It is unlawful to sell or purchase any part of a black bear except as specifically permitted by the laws of Montana. The sale or purchase of hides, heads or mounts of lawfully killed black bear is not prohibited. The penalty for the unlawful sale may be subject to a fine of $10,000 or imprisonment in the state prison for a term of 1 year or both.

Tagging — Immediately after harvesting a black bear, a sportsperson must cut out the proper month and the day of the harvest from the appropriate license/tag and attach to the animal in a secure and visible manner. If more than one date is cut out, the license is invalid. The properly validated license shall remain attached to the hide until tanned.

Trichinella Testing—This testing is optional and free-of-charge. Send one-third of the tongue or equal size muscle tissue to: Dr. David E. Worley, Veterinary Research Lab. MSU, Bozeman, MT 59715.

Black Bear — General Season

- All black bear licenses are valid for the specified districts and seasons as listed below.
- All districts listed below shall be open to hunting of black bear of either sex.
- The following areas are closed to black bear hunting:
  1) All State Game Preserves,
  2) All hunting districts beginning with the number 6 and 7,
  3) All National Wildlife Refuges,
  4) Gallatin Closed Area (boundary description on page 8 of the Big Game Legal Descriptions), and
  5) Hunting privileges on Indian Reservations are limited to tribal members only.

EXCEPTION TO GENERAL SEASON:

1) All Wildlife Management Areas in administrative regions 1, 2, 3, 4 and 5 are closed to public entry from the day following the end of general deer/elk/bear season, or December 1, whichever is later to May 15 each year.

100 SERIES DISTRICTS—General Season—NO QUOTAS

Apr. 15 - May 31
Sept. 5 - Nov. 29

Exceptions:

100, 101, 103, 104, 121, 122	Apr. 15 - May 15 Sept. 5 - Nov. 29
123 & 124	

Hunting district 141 - Snowslip Corn Spill Area closed to all hunting of black bear. See legal description.

200 SERIES DISTRICTS—General Season—NO QUOTAS

Apr. 15 - May 31
Sept. 5 - Nov. 29

Exceptions:

284	Apr. 15 - May 31 Sept. 5 - Nov. 29	ARCHERY ONLY ARCHERY ONLY

300 SERIES DISTRICTS—General Season—NO QUOTAS

Apr. 15 - June 15
Sept. 5 - Nov. 29

Exceptions :

310	Gallatin Closed Area portion—buffer zone adjacent to Yellowstone National Park - closed to all hunting of black bear
313	Deckard Flats—Eagle Creek portion of hunting district 313 as posted, subject to closure of all hunting on 24-hour notice.

General Season (Continued)

400 SERIES DISTRICTS—General Season—NO QUOTAS

April 15 - May 31 Sept. 5 - Nov. 29	Those 400 series districts or portions of districts lying west of Interstate Highway 15.
April 15 - June 15 Sept. 5 - Nov. 29	Those 400 series districts or portions of districts lying east of Interstate Highway 15.

500 SERIES DISTRICTS—General Season

SPRING SEASON:

HUNTING DISTRICTS (OR GROUPS)	HUNTING SEASONS	BEAR HARVEST QUOTAS	
		TOTAL	FEMALE SUB-QUOTA
500, 511, 530 & 590	April 15 - May 31	9	3
502, 520, 560 & 575	April 15 - May 31	20	6
520	The newly acquired Point of Rocks Wildlife Management Area (near Red Lodge) as posted, shall be closed December 1 to May 31 each year.		
510	April 15 - May 31	9	3
540	April 15 - June 15	NO QUOTA	
570 & 580	April 15 - May 31	12	4

FALL SEASON:

All hunting districts in the 500 series.	Oct. 25 - Nov. 29		
Exceptions:			
540	Sept. 5 - Nov. 29	NO QUOTA	
560	Sept. 5 - Oct. 24	5	NO QUOTA

That portion of hunting district 560 between main Boulder River and Lower Deer Creek outside National Forest Boundary only. All of 560 remains open Oct. 25-Nov. 29.

When the quota or sub-quota is reached in the hunting district(s) or groups, the black bear season for that area will close upon 48 hour notice, but no later than last date of season shown in the regulations.

Any person taking a black bear in the spring in the 500 series districts except hunting district 540, and in the fall in the quota portion of 560, must personally report their black bear kill within 48 hour to an officer of the department in administrative Region 5 and must personally present the hide and skull within 10 days to an officer of the department residing in administrative Region 5 for purposes of inspection, recording sex and removing a tooth for aging. The hide and head must be retained even though damaged.

800 SERIES DISTRICTS—General Seasons—NO QUOTAS

Apr. 15 - June 15
Sept. 5 - Nov. 29

There is no special ARCHERY ONLY season for black bear.

By order of the Montana Fish, Wildlife and Parks Commission, the seasons, limits and regulations listed herein shall govern the 1992 black bear hunting seasons. These regulations are valid March 1, 1992, through February 28, 1993 and were adopted by the Fish, Wildlife and Parks Commission on February 7, 1992: K.L. Cool, Secretary.

Montana Department of Fish, Wildlife & Parks

BLACK BEAR

1992 HUNTING REGULATIONS
STATE OF MONTANA

General Regulations

These regulations apply to all legally described black bear hunting districts.

Licenses — The following licenses are available at all Fish, Wildlife and Parks offices and most license agents throughout the state.

Conservation License (Prerequisite)	$4.00 Res. & $5.00 Non-Res.
Resident Black Bear License	$ 11.00
Nonresident Black Bear License	$120.00

Baiting — It is illegal to bait bears or to hunt bears with dogs.

Clothing Color — During the "gun" season, any person hunting or accompanying a sportsperson as an outfitter or guide must wear a minimum of 400 square inches of hunter orange (fluorescent) material above the waist, visible at all times.

Evidence of Sex — A sportsperson harvesting a black bear must leave evidence of sex naturally intact on the hide, and if required by the department, must physically go back to the kill site for inspection.

Game Limit — A sportsperson may legally harvest one black bear per license year. Female bears with young and individual cubs may not be harvested.

Grizzly Bear — Any accidental taking of a grizzly bear shall be reported within five (5) days of occurrence, to the Director, Montana Department of Fish, Wildlife and Parks, 1420 East Sixth Avenue, Helena, MT 59620 and to the U.S. Fish and Wildlife Service, Division of Law Enforcement, P.O. Box 25486, DFC, Denver, CO 80225.

Hunter Education — Both resident and nonresident youths 12-17 years of age must provide a Certificate of Competency in the safe handling of firearms before they may purchase a hunting license.

Bowhunters — 12-17 years of age are required, in addition to firearm safety, to provide a Certificate of Competency in the safe handling of bow hunting tackle from the National Bowhunter Education Program.

All adult (18 years of age or older) first-time bowhunters must show proof of an NBEF Bowhunter Education Certificate to purchase a Bow and Arrow license **OR present** any prior years' bow and arrow license, stamp, tag, or permit from any state or province.

Hunting Hours — Hunting hours begin one-half hour before sunrise and end one-half hour after sunset. See official sunrise-sunset table in the 1992 Big Game Hunting Regulations.

Landowner Permission — A sportsperson pursuing black bear must secure permission from the landowner, lessee or their agent before hunting on private property, even if the land is not posted.

Mandatory Reporting Requirements — Within ten (10) days of harvesting a black bear, the successful sportsperson must present to an official of the department within the administrative region where the kill was made, the bear skull for purposes of removal of a tooth for aging. See Exceptions listed under the 500 series districts.

Appendix 2.
Figure 1.

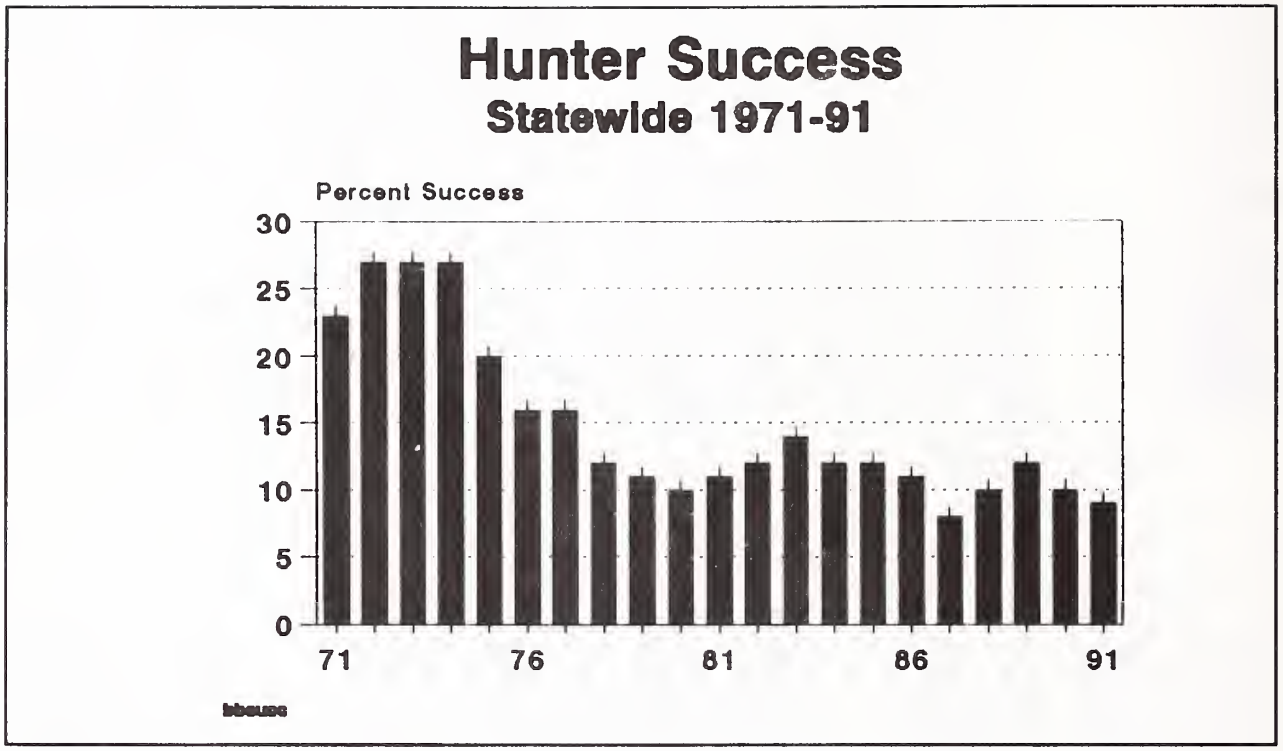


Figure 2.

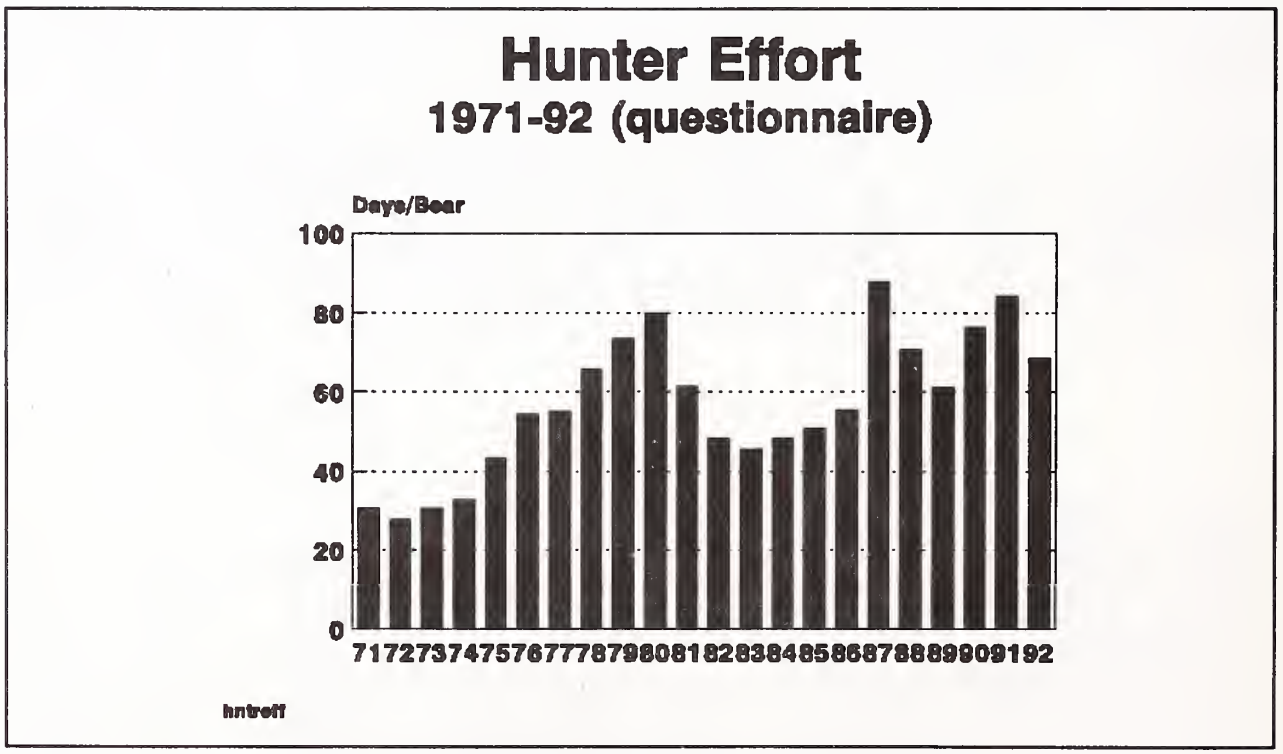
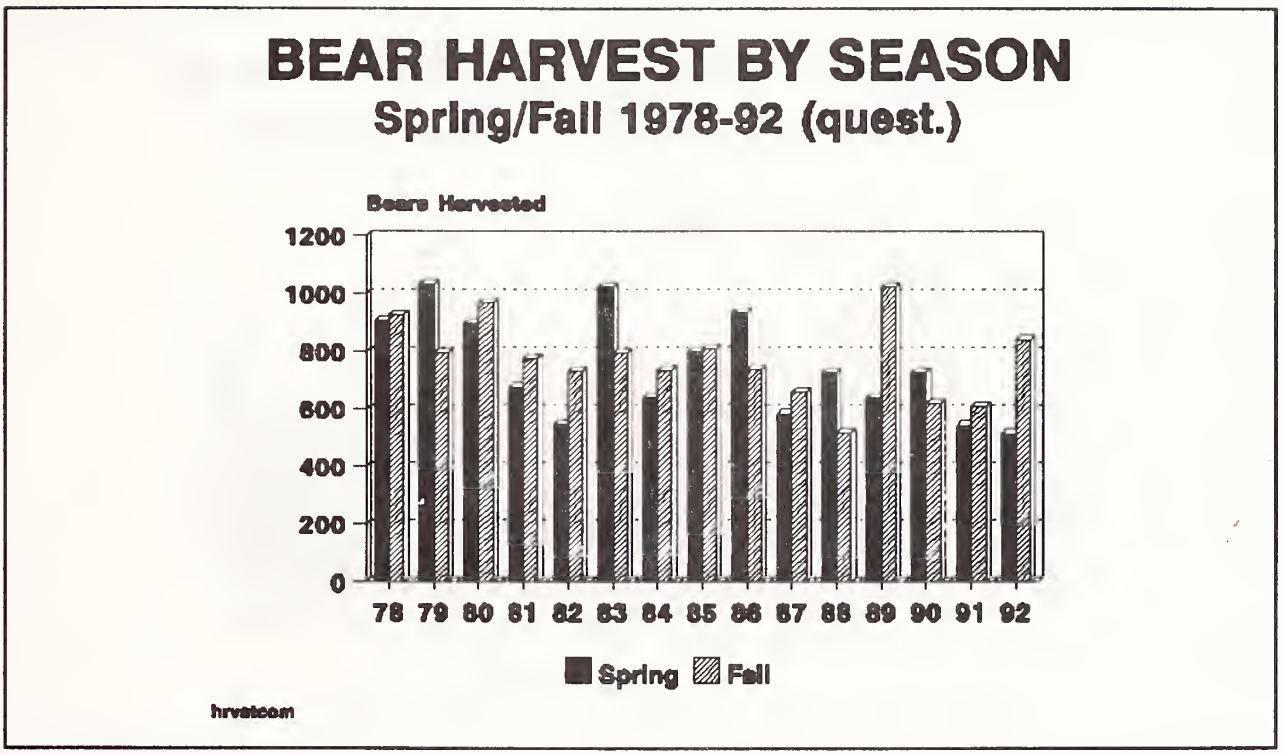


Figure 3.



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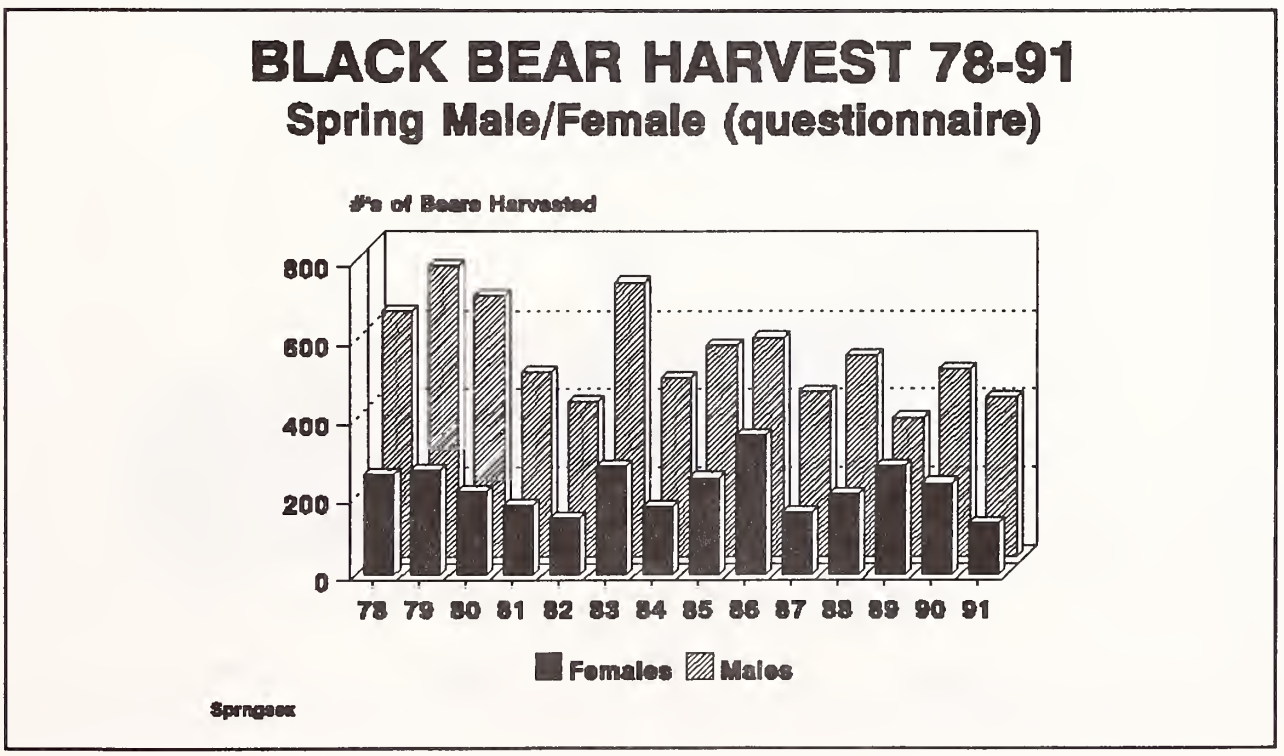
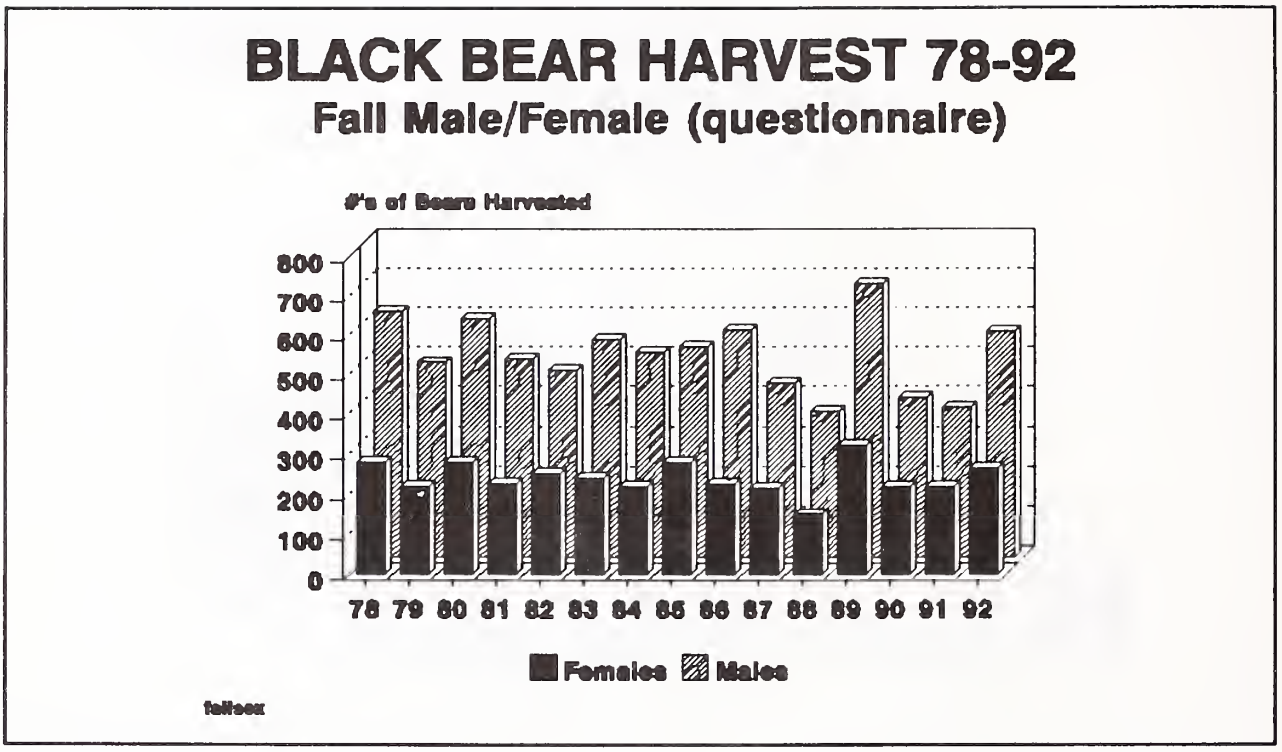


Figure 5.



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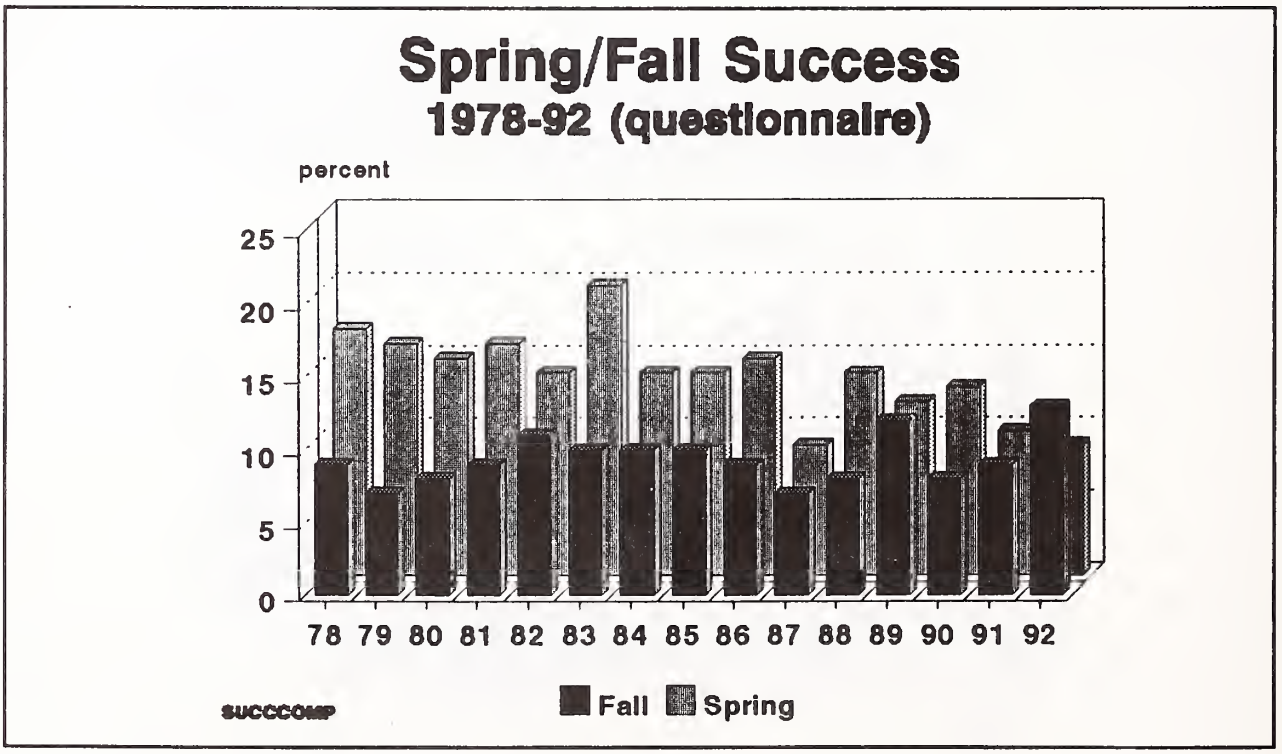

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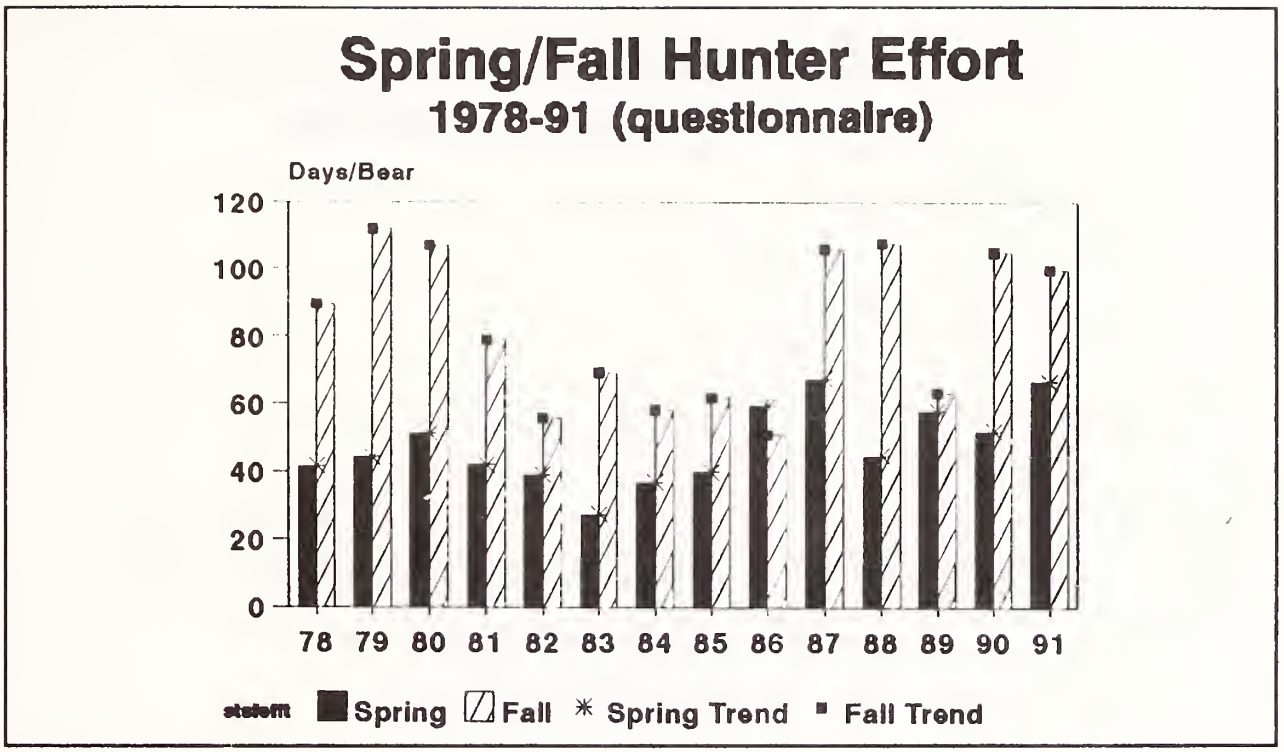

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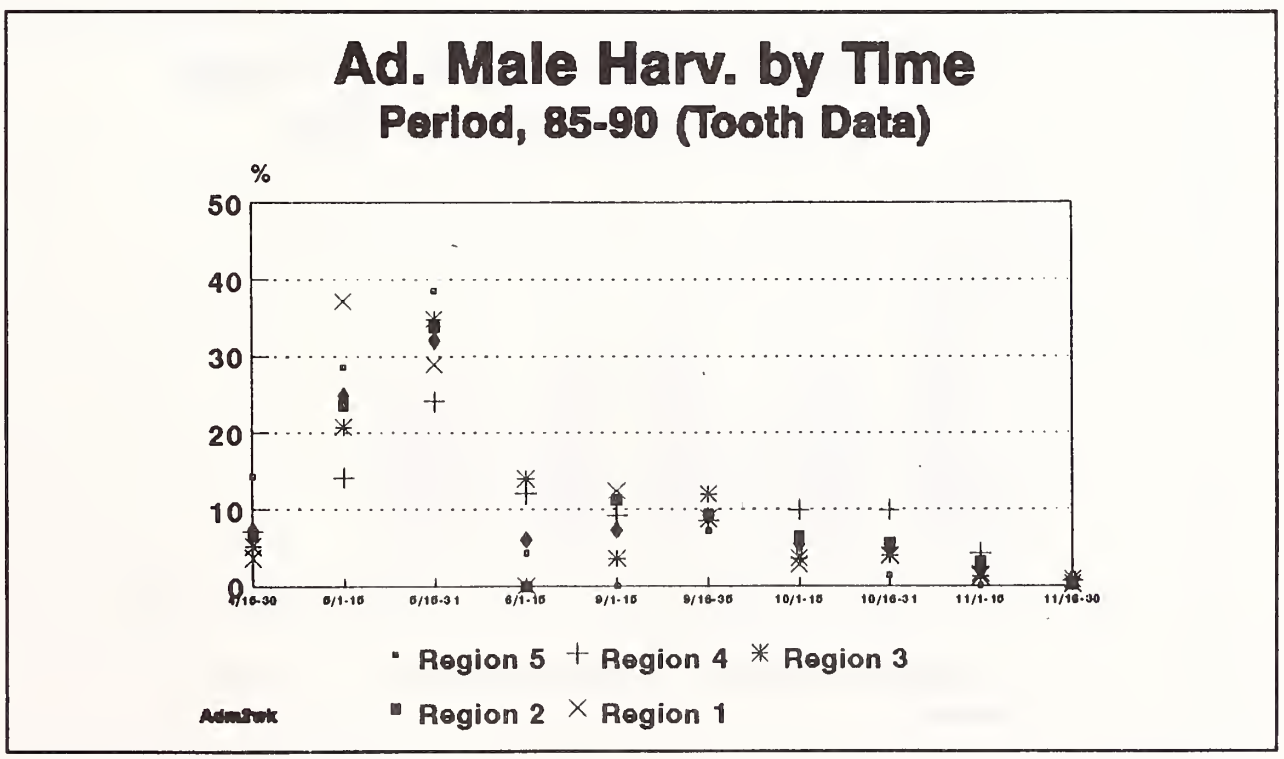


Figure 9.

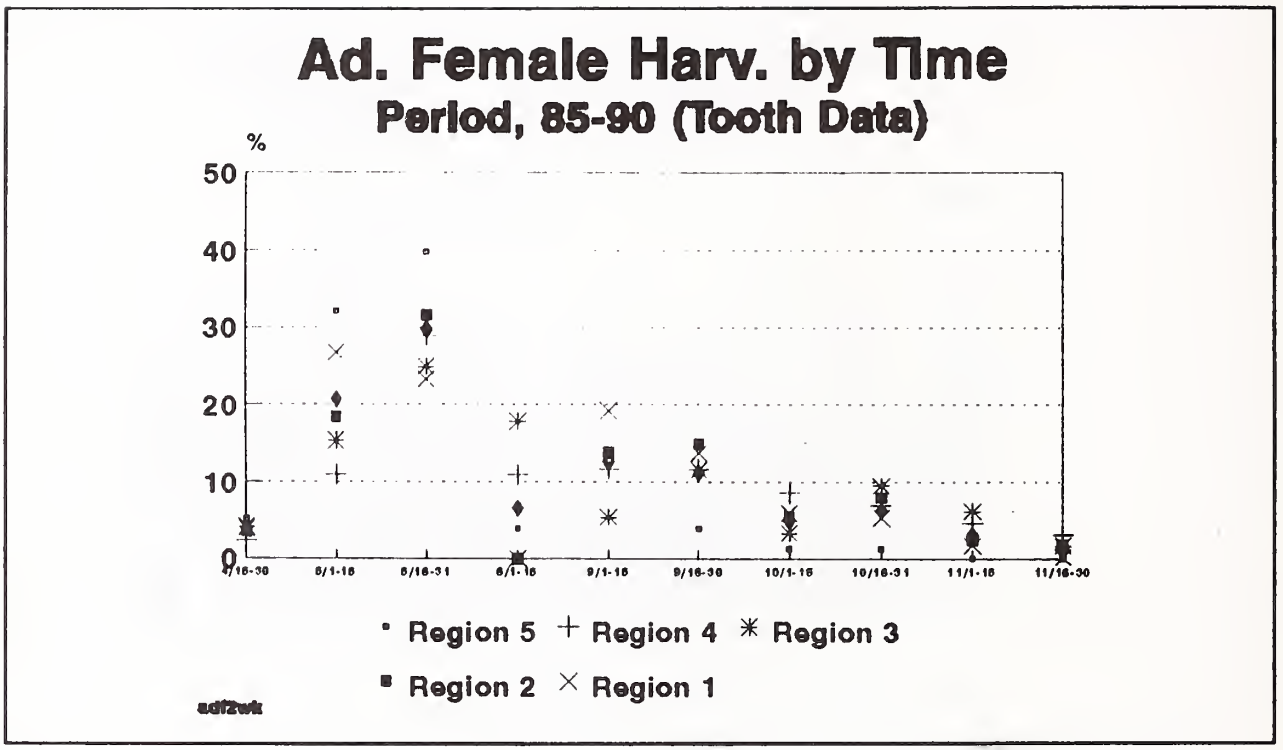


Figure 10.

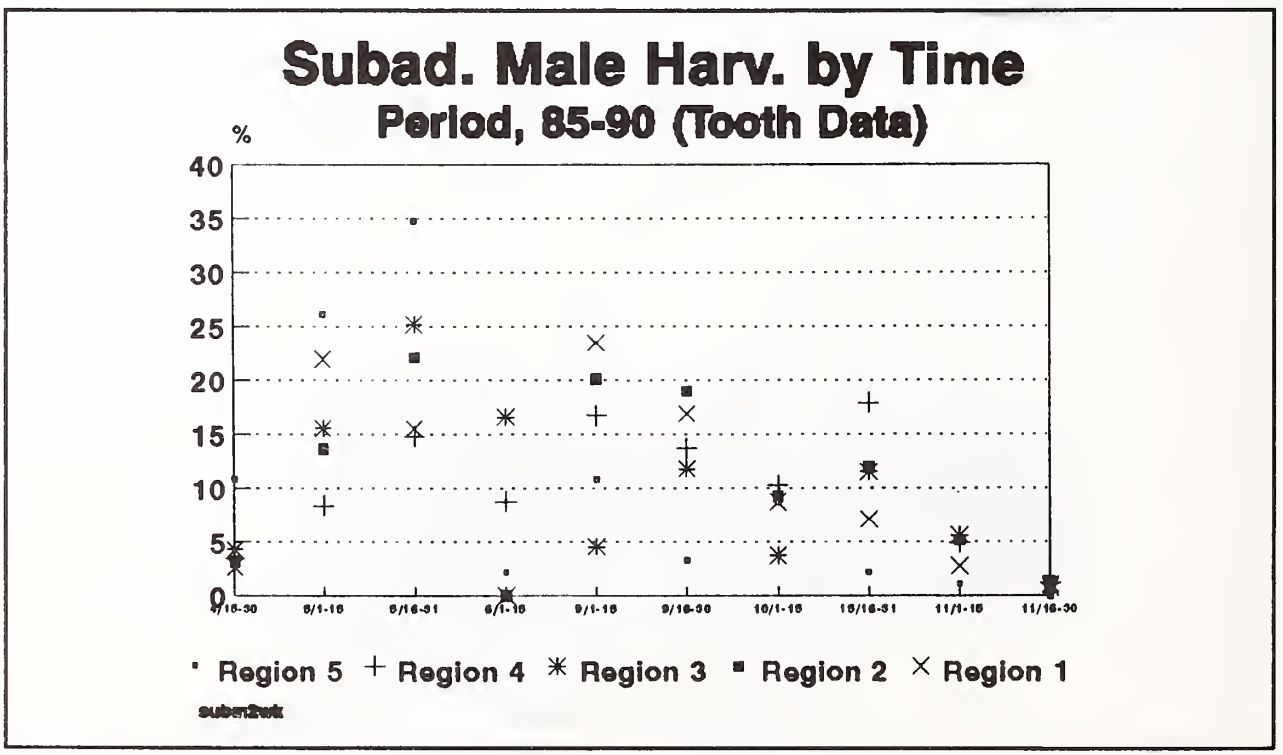
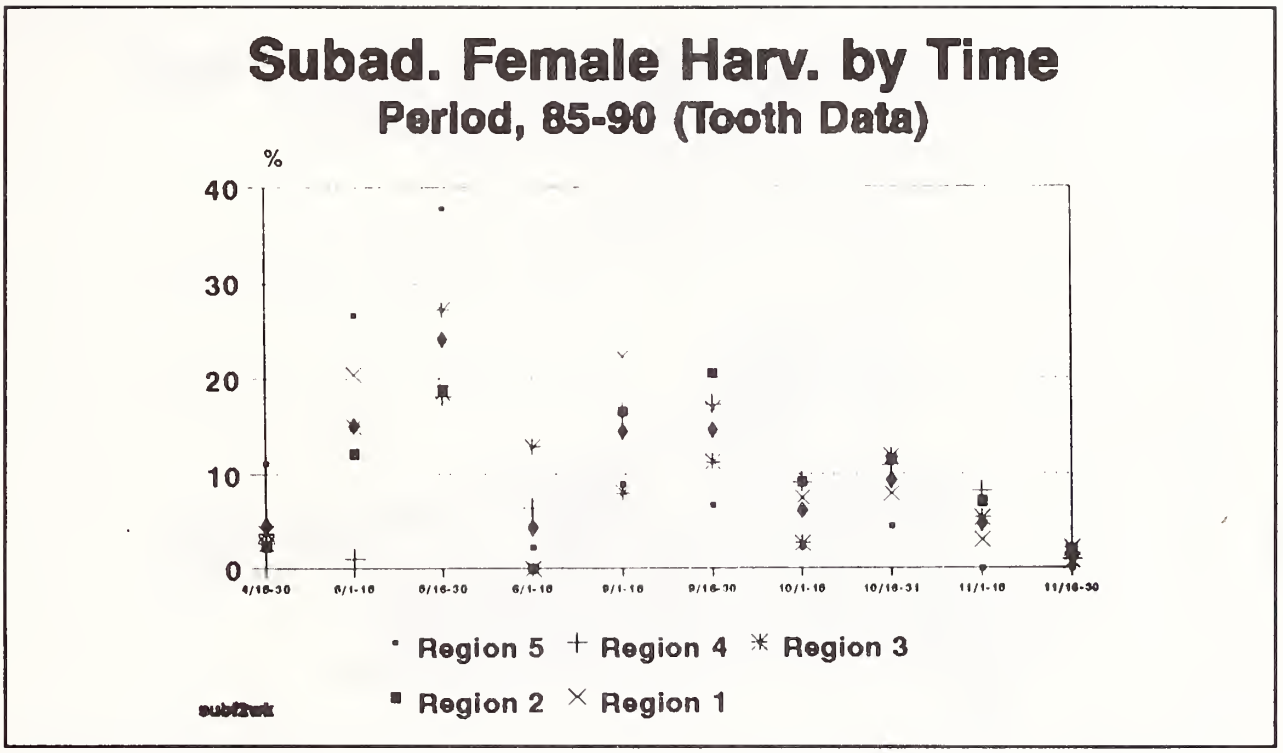


Figure 11.



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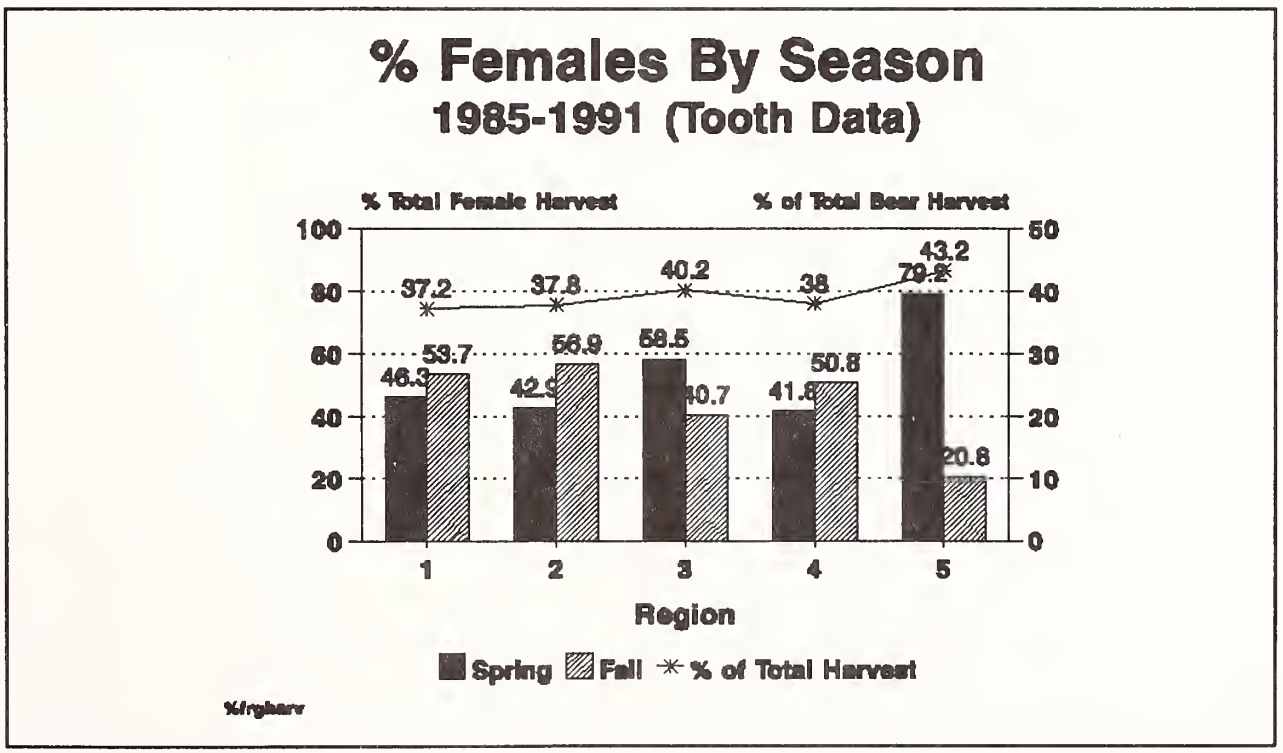
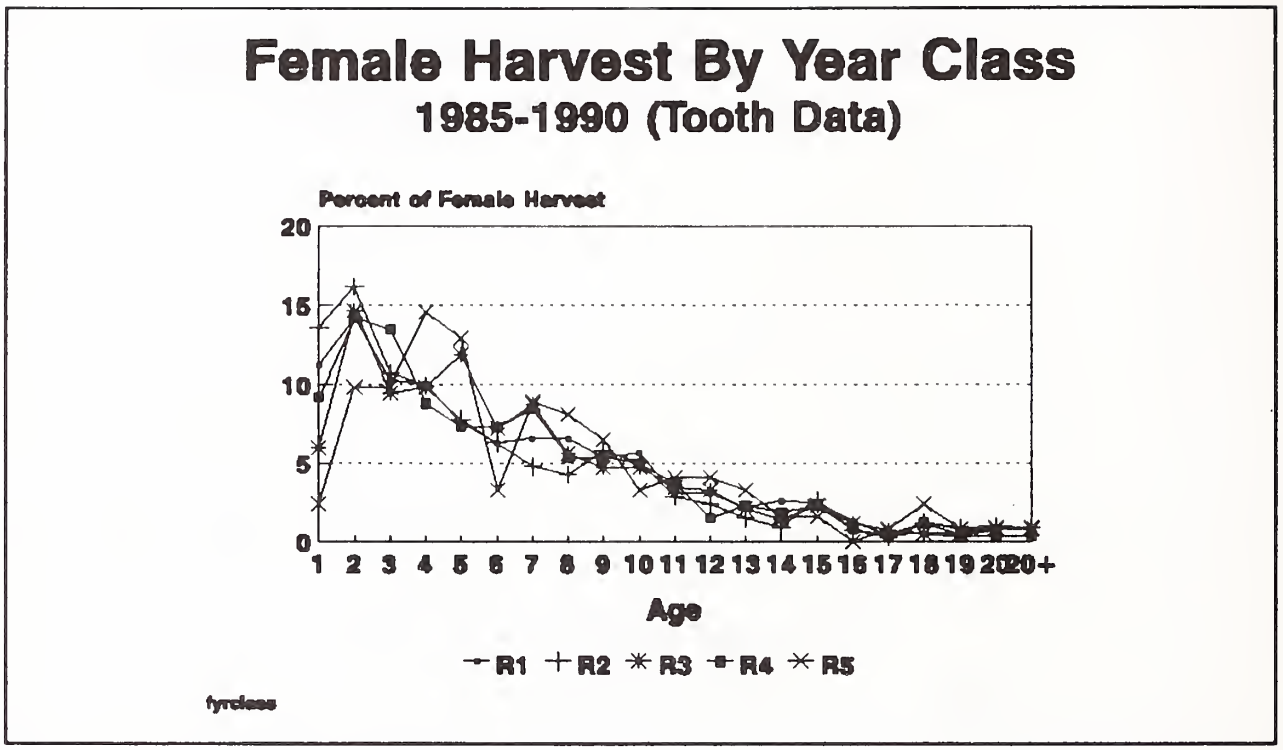
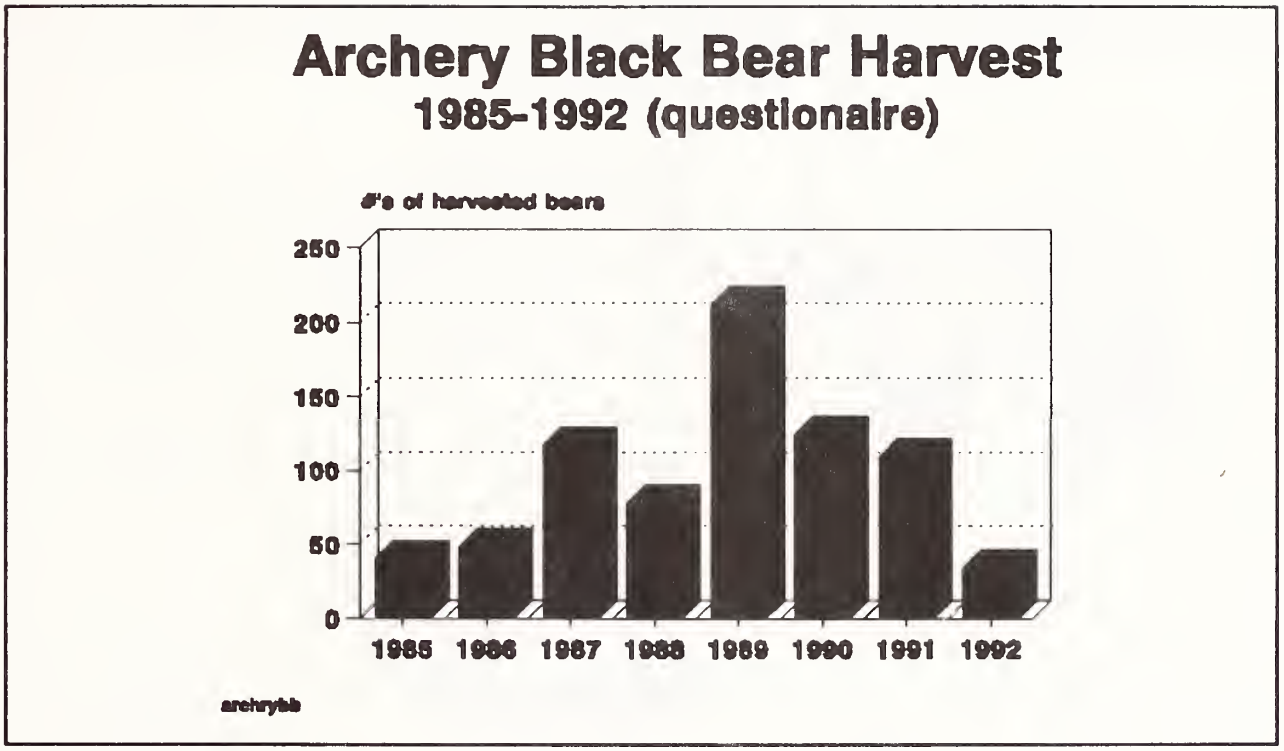


Figure 13.

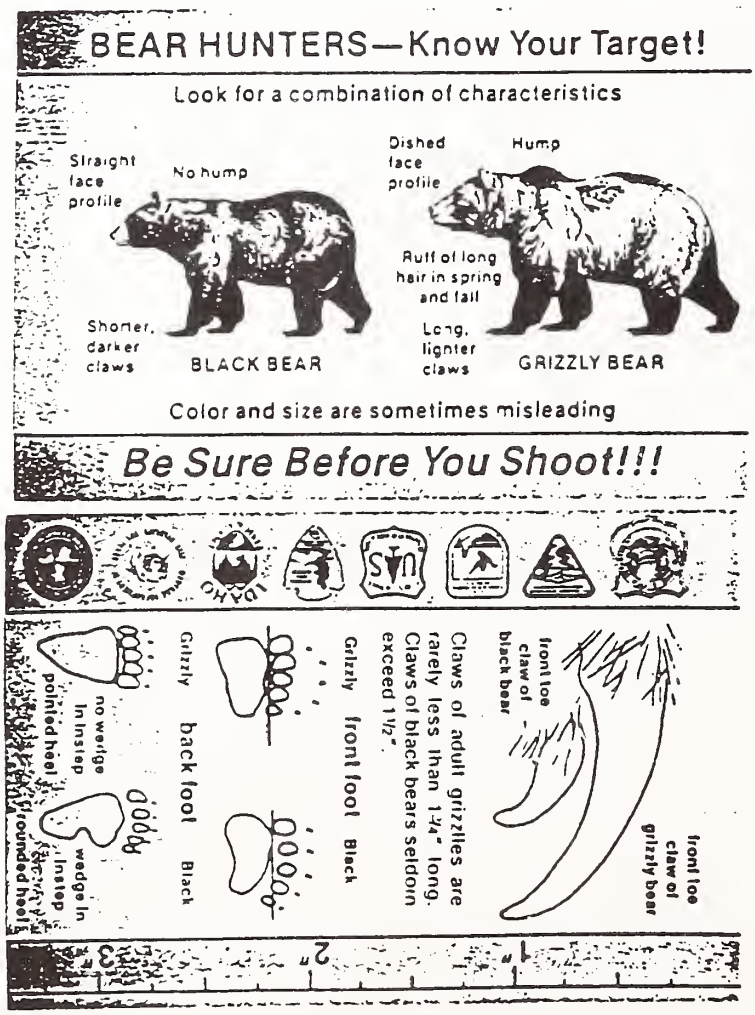

Female Harvest By Year Class
1985-1990 (Tooth Data)
Percent of Female Harvest
20
15
10
5
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 20+
Age
R1 R2 R3 R4 R5

Appendix 3.


Archery Black Bear Harvest
1985-1992 (questionaire)
#'s of harvested bears
250
200
150
100
50
0
1985
1986
1987
1988
1989
1990
1991
1992
archrybb

Appendix 4.

Information and education efforts on grizzly bears by the MDFWP, 1986-1990.



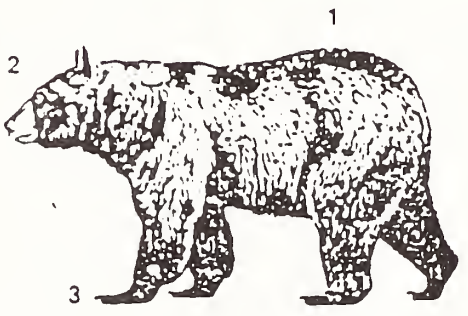
BLACK or GRIZZLY BEAR?

BLACK BEAR

1. Highest point of back is well back of shoulders. No prominent shoulder hump.

2. In profile muzzle is long and straight.

3. Front claws dark colored, relatively short and well-curved.

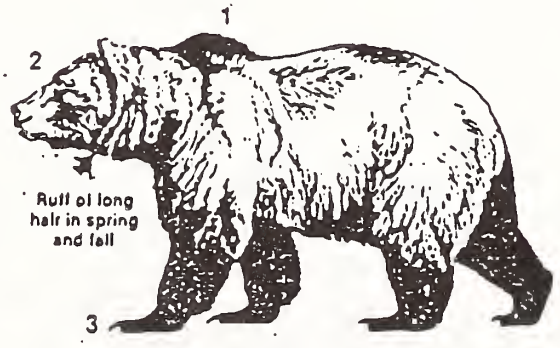


GRIZZLY BEAR

1. Highest point of back is muscular hump over front shoulders.

2. In profile, brow gives "dished" look to face. Not as well defined in yearlings.

3. Front claws up to 4" long or longer, slightly curved. Front claws light colored and can sometimes be observed from great distances.



COLOR Color and size are not good identifying characteristics. Color of both species may range from light brown (blonde) to very dark black. Many grizzlies have light tipped hairs which give them a distinctive sheen.

RUBBING During spring, rubbed spots make the hide poor quality. Look for rubbed spots and that the bear is not a grizzly.

BE SURE BEFORE YOU SHOOT

Montana Department of Fish, Wildlife & Parks

It is not always easy to distinguish between the black and grizzly bears. Color and size are not dependable criteria, so other features must be looked for.

If you are hunting black bears in an area that may be inhabited by grizzlies, take your time and be sure what you're shooting at. Better to pass a shot at a black bear than kill a grizzly.

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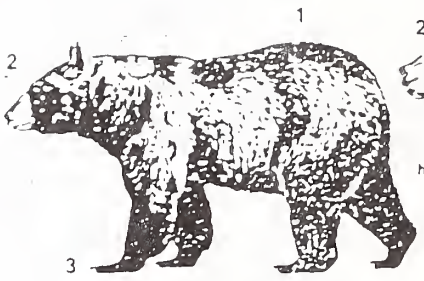
AIDS TO IDENTIFICATION OF SPECIES

Look for a combination of characteristics to make identification



BLACK BEAR

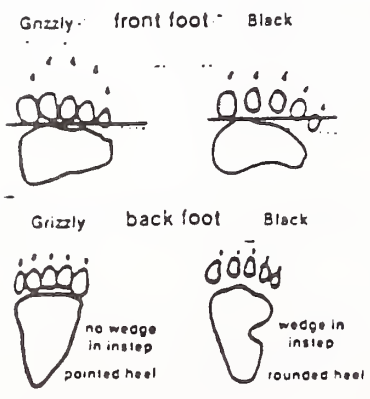
1. No prominent shoulder hump. Highest point of body is the back.
2. In profile muzzle is straight and long. Frontally, head and face appear round.
3. Claws dark, much shorter and more curved than grizzly claws.

GRIZZLY BEAR

1. Highest point of back is a muscular hump over the front shoulders.
2. In profile distinct brow gives "dished" look to face. The brow is not as well defined in yearlings.
3. Front claws are long, very prominent, and often light colored. Can sometimes be observed from great distances.

TRACKS

Hind foot tracks of bears seldom show claw marks, and front tracks of black bears seldom show claw marks, but when they are evident, length of front foot claw marks from toe pads can help distinguish grizzly from black bears. Claws of adult grizzlies are rarely less than 1¾" long. Claws of black bears seldom exceed 1½".

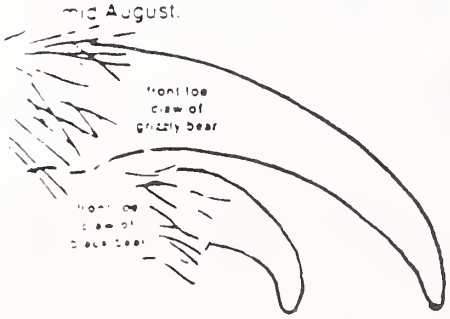


COLOR

Color of both black and grizzly bears may range from light brown (blonde) to very dark black. Color is not an indicator of the species. Many grizzlies have light-tipped hairs which gives them a distictive sheen, and the nickname "silvertip".

PELT QUALITY

In spring when bears emerge from hibernation their pelts are prime for tanning. As they begin to shed they rub away patches of old hair and the pelts are no longer fit for trophies until shedding has been completed, about mid August.



HUNTER

WHAT KIND OF BEAR IS THIS?

Montana Department of Fish Wildlife and Parks

Appendix 5.

Table 31. Categories of known, man-caused nonhunting mortality in the NCDE, 1975-1985.

Category	No. of Bears	Average No. Per Year
Defense of life or property		
Marauder:	15	
Transplant (from NCDE):	8	
Control:	8	
Menace:	8	
Nuisance:	4	
Handling (occurred during transplant):	4	
Subtotal:	47 (51%)	4.3
Mistaken Identity: Subtotal:	11 (12%)	1.0
Poaching or Vandal Killing		
Parts taken:	12	
Carcass removed:	5	
Unclassified:	5	
Nothing taken:	5	
Subtotal:	27 (29%)	2.5
Vehicle Collision		
Train:	5	
Automobile:	2	
Subtotal:	7 (8%)	.6
TOTAL:	92	8.4

Table I.1. Individual grizzly bear mortalities in the NCDE, 1986.

Ref. Number	Bear ID	Date	Sex	Age	Weight (lbs.)	Location	Location Ownership	UTM	Status	Details of Mortality
N86-1	179396	March-April 1986	F	2	115	Post Creek	FIR	3814-52568	Known	Illegal
N86-2	179397	March-April 1986	F	3	165	Post Creek	FIR	3814-52568	Known	Illegal
N86-3[1]	179490	5/7/86	M	11		Many Glacier Hotel	GNP	3049-54081	Known	Accidental - Bear hung himself- Garbage
N86-4	031986 #341	5/9/86	F	2	205	Deep Creek	PR - MT	3995-52867	Known	Management control - sent to zoo - Detroit, MI). Bear was under porch
N86-5[2]	179403 #410	5/20/86	M	3		Smith Creek, East Front	LCNF	3728-52481	Known	Natural Death: Abdominal and skull injuries inflicted by Bear No. 412 (male)
N86-6	011986 #101	June 1986	F	4		Two Medicine River	BIR	3669-53702	Known	Illegal - collar found in river with bullet hole in it (July, 1986). Trapped on 5/16/86 at Ford Creek - transplanted to Hungry Horse. Wt. at capture = 265 lbs.
N86-7	041986 #498	6/3/86	M	7		Poole Creek - N. Fk. Badger Ck.	LCNF	3400-53400	Known	Accidental - Handling Death - Carcass found 1/4 mile from trap.
N86-8[3]	021986 #326	6/23/86	M	3		Bear Creek	FNF	3200-53500	Known	Unreported mortality - illegal - collar found cut off, under a bank; no sign of carcass. Previously had been trapped at Ear Mountain in 1985. (Wt. = 235 lbs. in 1985)
N86-9	179470	10/1/86	M	2		S. Fk. Flathead	FNF	3200-52850	Known	Legal kill - hunter
N86-10	179474	10/2/86	M	3		Miner Creek	FNF	3250-53300	Known	Legal kill - hunter
N86-11	179472	10/5/86	F	5		Tanner Creek	FNF	3200-53250	Known	Legal kill - hunter
N86-12	179471	10/8/86	F	15		Tunnel Creek	FNF	3000-53700	Known	Legal kill - hunter
N86-13	179473	10/10/86	M	6		Addition Creek	FNF	3100-53050	Known	Legal kill - hunter

Ref. Number	Bear ID	Date	Sex	Age	Weight (lbs.)	Location	Location Ownership	UTM	Status	Details of Mortality
N86-14	179632 #106	10/11/86	M	4		Blackleaf Game Range	MDFWP	3759-53153	Known	Unknown - illegal(?) or possible cripple loss - bullet wound found; had been trapped 10/9/86 as problem bear feeding on carcasses at feed lot.
N86-15	179500	11/19/86	M	Cub		Java	FNF	3150-53460	Known	Vehicle kill - Hit by train

[1] Quotas for known, man-caused mortality have been established only for the bears outside of Glacier National Park. Therefore, mortalities of bears within the park do not count against established quotas.

[2] This bear is not included in man-caused mortalities since it died of natural causes inflicted upon it by another male adult grizzly bear.

[3] This mortality would not have been documented if the bear had not been radio-collared. Therefore, it is classified as an unreported mortality. Because these are already taken into account when establishing allowable quotas, the mortality does not count against the know mortality quota established for 1986.

The 1986 grizzly bear hunting season opened on October 1 and ran through 1/2 hour after sunset on October 11.

Summary (Northern Continental Divide Ecosystem) - Human-caused Mortalities:

Quotas: 14 total, 6 female

Actual kill: 12 total, 6 female

Table I.2. Individual grizzly bear mortalities in the NCDE, 1987.

Ref No.	Bear ID	Date	Sex	Age	Weight (lbs.)	Location	Location Ownership	UTM	Status	Details of Mortality
N87-1	179641	6/24/87	M	14		South Fork Cutbank Creek, BIR	PR - MT	3490-53850	Known	Management control - livestock depredation
N87-2	179644 #108	7/30/87	M	1		Dupuyer Creek	PR - MT	3749-53380	Known	Management control - nuisance bear
N87-3	179676 #4039	8/3/87	F	8-12 (est.)	250	Fatty Creek	PR - MT	2870-52875	Known	Management control - nuisance bear - had 2 cubs.
N87-4		8/3/87	F	Cub		Fatty Creek	PR - MT	2870-52875	Known	Management control - to research facility. (Live removal.)
N87-5		8/3/87	F	Cub		Fatty Creek	PR - MT	2870-52875	Known	Management control - to research facility. (Live removal.)
N87-6	Cub of 179670[1]	8/12/87	M	Cub		Many Glacier	GNP	2997-54045	Known	Accidental trapping casualty - bear was being moved as a family unit - dart entered chest cavity. People habituated. Mother and cub transplanted
N87-7		8/12/87	F	Cub		Pinchot Creek	GNP	3056-53736	Prob.	Unknown cause - transplant related. Cub of N87-9.
N87-8	179672 #316	9/19/87	F	5		Deep Creek	PR - MT	3800-52862	Known	Legal kill - Hunter (damage hunt).
N87-9	179670	10/1/87	F	9-10	242	Kiowa - Hanlon	BIR	3325-53794	Known	Illegal (sow and cub were transplanted - cub's fate is unknown) - other cub was the mortality on 8/12/87.
N87-10	179706 Hunter #518	10/6/87	F	Adult		Cox Creek	FNF	3450-53300	Known	Legal kill - Hunter
N87-11	#355	10/6/87	M	Adult	640 in 1984	Ayres Creek	FNF	3490-52480	Known	Legal kill - Hunter
N87-12	#467[2]	Fall 1987	M	4		Swift Dam	LCNF	3620-53323	Known	Unknown - Possible illegal - carcass found May 30, 1988.

[1] The quota is only for bears outside of Glacier National Park, so this bear did not count aginst the quota.
[2] Does not count againts man-caused mortality quota.

Table I.3. Individual grizzly bear mortalities in the NCDE, 1988

Ref No.	Bear ID	Date	Sex	Age	Weight (lbs.)	Location	Location Ownership	UTM	Status	Details of Mortality
N88-1	#1, #391 179736	5/13/88	F	11		Fatty Creek	FNF	2880-52930	Known	Illegal kill-Poacher tried and convicted. Est. Wt 350 lbs. Bear had been relocated, had two yearlings at time of death.
N88-2	412 179860	7/13/88	M	10	535	East Front (Harrison Basin)	PR-MT	3856-52409	Known	Management control - livestock depredation
N88-3[1]	719747	7/16/88	F	7	218	Granite Park	GNP	2960-54053	Known	Accidental handling death - possibly due to adverse drug reaction. Habituated to people.
N88-4	97 179809	9/18/88	F	27	202	Quintonkin Creek	FNF	2919-53226	Known	Natural - killed by another grizzly bear
N88-5	179785	9/26/88	M	Ad		Youngs Creek	FNF	3235-52380	Known	Illegal - mistaken for black bear
N88-6	179807	9/28/88	F	4		White River	FNF	3320-52720	Known	Illegal - mistaken for black bear
N88-7	179808 #363 blue	10/1/88	F	14		Wheeler Creek	FNF	2870-52720	Known	Legal hunter kill
N88-8	179835	10/1/88	F	3		Dry Creek	PR - MT	3550-52140	Known	Legal hunter kill
N88-9	179805	10/6/88	F	1		Stanton Creek	FNF	2915-53600	Known	Legal hunter kill
N88-10	#335	10/6/88	F	10.5		East Front Gansman Coulee	PR - MT	4011-53174	Known	Legal hunter kill

[1] Only man-caused mortalities outside Glacier National Park count toward established quotas.

The 1988 hunting season in the Northern Continental Divide Ecosystem opened on October 1 and closed on October 9.

Summary (Northern Continental Divide Ecosystem) - Human-caused Mortalities:

Quotas: 14 total, 6 female

Actual kill: 8 total, 6 female

Table I.4. Individual grizzly bear mortalities in the NCDE, 1989

Ref No.	Bear ID	Date	Sex	Age	Weight (lbs.)	Location	Location Ownership	UTM	Status	Details of Mortality
N89-1		5/12/89	F	24-26		Java Creek	FNF	3090-53460	Known	Legal - Defense of Life.
N89-2		5/15/89	M	8		Paola Creek	FNF	3030-53570	Known	Illegal - Mistaken ID for black bear.
N89-3		5/25/89	M	Sub AD		Canyon Creek	FNF	7030-53770	Known	Illegal - Poaching
N89-4		6/12/89	F	1	65	Mid Fork Flathead	FNF	3160-53460	Known	Vehicle kill - Injured by train. Euthanized by officials.
N89-5	BIR #51-52	Mid-July	F	2		East Glacier	BIR[b]	3370-53680	Known	Illegal - Radio cut off bear, no carcass found. Indications are that mortality occurred on Blackfeet Indian Reservation and collar was disposed of in Paola Creek.
N89-6		7/19/89	M	est. 10-12		Devil Creek Campground/ Snowslip snow shed	FNF	3170-53470	Known	Vehicle kill - Train.
N89-7[1]		7/29/89	M	est. 2		S.E. Palookaville	BIR	3480-53550	Known	Legal - defense of life.
N89-8[2]	MDFW P #98	first wk Sept.	M	2.5		Jewel Basin	FNF	2790-53370	Known	Unreported mortality - illegal. Radio found cut off bear, no carcass found, wt. 128 lbs. on June 23, 1989.
N89-9	BIR #53-54	9/9/89	F	8		Dupuyer Sheep Creek	PR-MT	38020-533785	Known	Under investigation. Killed by rancher while bear was attacking sheep.
N89-10	MDFW P #13	9/29/89?	M	Ad.		Young's Creek	FNF	3300-52480	Known	Legal - defense of life.
N89-11	MDFW P #12	10/1/89	F	2.5		Slick Creek S. Fk. Flathead	FNF	31760-52891	Known	Illegal kill.
N89-12	MDFW P #148	10/2/89	M	8.5		Little Salmon Fork	FNF	3215-52793	Known	Legal - defense of life.
N89-13		8/26/89	Unk	Cub		Battery Mtn. area	FNF	Unk	Prob.	Natural mortality. Not seen with mother in 1990.

Table I.5. Individual grizzly bear mortalities in the NCDE, 1990

Ref No.	Bear ID	Date	Sex	Age	Wt.	Location	Location Ownership	UTM	Status	Details of Mortality
N90-01	FG #144	4/30	M	13	498 lbs.	East side Flathead Valley Labrandt Rd.	PR-MT	7175-53373	Known	Under investigations. Poss. self defense - killed by landowner near dog pen.
N90-02	unmarked	5/21	F	3-4 est.	under 200 lbs.	Mid. Fk. Stanton Creek	FNF	2992-53644	Known	Vehicle kill - Train - cut in half
N90-03[1]	FG #43	6/1	M	1	45 lbs.	Posey Creek	FNF	2901-53288	Known	Natural mortality - Killed by another grizzly bear within 24 hrs. after being trapped and released
N90-04[2]	unmarked	6/3	F	15+	over 250 lbs.	Mid. Fk. Bear Creek	FNF	3104-53455	Known	Vehicle kill - Train
N90-05	BIA #55	6/5	M	4	225 lbs.	West of Browning	BIR	3500-53700	Known	Under investigation. Bear shot after walking past private residence - case under investigation
N90-06[1]	FG #44	6/8	F	8-10 est.	225 lbs.	Slide Creek	FNF	3005-53218	Known	Unknown; bear marked on 6/3 by research team with no apparent problems - located on 6/5 .8 miles from capture site - located 6/8 1.18 miles from capture site - found dead at this location - cause of death could not be determined
N90-07	unmarked	6/9	M	cub	15 lbs.	5-6 miles east of Marias Pass	BIR	3349-53651	Known	Vehicle kill - Train - (Sow was also hit but her fate is unknown)
N90-08	unmarked	6/9	M	cub	12 lbs.	5-6 miles east of Marias Pass	BIR	3349-53651	Known	Management control - Live removal - injured by train with 90-07 - taken to veterinarian in Conrad - then transported to zoo
N90-09	FG Eartag #C2335	6/18	M	4	unknown	Bear Creek	FNF	3165-53472	Known	Management control - Live removal to research facility. Nuisance bear - threatening workers at BN corn spill

Ref No.	Bear ID	Date	Sex	Age	Wt.	Location	Location Ownership	UTM	Status	Details of Mortality
N90-10[3]	FG #47	Between 6/17-28	F	2	70 lbs. est.	Ball Creek	FNF	2945-53194	Known	Natural mortality; when this bear was captured (6/6) it had very severe recent bites from another bear - no body fat - protracted rectum - heavy tick infestation - bear ultimately died from these wounds
N90-11	FG #117	8/7	M	3.5		Teton River - near Choteau	PR-MT	4155-52926	Known	Live removal - mgt. control: to research facility. Nuisance bear - sheep depredation
N90-12		8/10	M	3.5		Teton River - near Choteau	PR-MT	4155-52926	Known	Live removal - mgt. control: to research facility. Nuisance bear - sheep depredation
N90-13	unmarked	10/19	F	1		3 mi. east of Java underpass	FNF	3131-53457	Known	Vehicle kill - Train - grain spill area
N90-14	unmarked	10/21	M	Adult		N. Fork Sun River	LCNF	3592-52930	Known	Legal - hunter kill
N90-15	MDFWP ear tags 5 and 6	11/4	M	3.5	215 est.	Polebridge	PR-MT	6997-54047	Known	Live removal - mgt. control: to research facility. Nuisance bear

[1] Although bear N90-03 could be classified as a natural mortality and the cause of death for bear N90-06 could not be determined (there is no proof it was man caused), the department counted both of these bears against established quotas to ensure a conservative approach to mortality management in the NCDE

[2] The second female grizzly killed by a train in the Middle Fork drainage filled the female subquota for the Flathead Bear Management Area. Therefore, there will not be a hunting season on grizzlies in the Flathead Area in 1990.

The 1990 grizzly bear hunting season opened on October 1 and closed on November 9.

Summary (Northern Continental Divide Ecosystem) - Human-caused Mortalities

Summary human caused quotas: 14 total 6 female

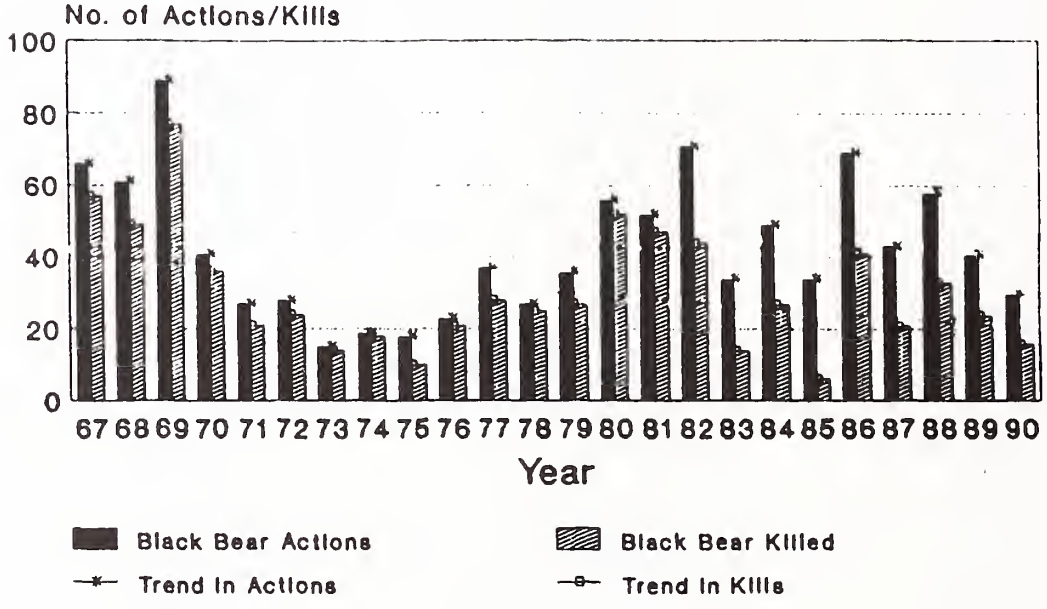
Actual kill: 10 total 4 female

Table 7.8. Grizzly bear mortality in the Cabinet-Yaak area, 1950-1990.

Year	Location	Total	Sex/Age	Mortality Cause
1950	Squaw Cr	1	Subadult	Unknown
1951	Pete Cr	1	Adult Male	Nuisance
1951	Papoose Cr	2	Subadults	Unknown
1951	Goat Cr	1	Subadult Male	Unknown
1952	Felix Cr	6	2 Adult Females, 4 Yearlings	Nuisance
1953	Obrien Cr	1	Subadult Male	Hunter Kill
1953	Kenelty Mt	1	Unknown	Hunter Kill
1953	20-Odd Mt	1	Unknown	Hunter Kill
1953	Burnt Cr	1	Unknown	Hunter Kill
1953	17-Mile Cr	1	Unknown	Hunter Kill
1954	N F Bull R	1	Unknown	Hunter Kill
1954	S F Bull R	1	Unknown	Hunter Kill
1954	Cedar Lk	1	Unknown	Hunter Kill
1954	Cedar Lk	1	Unknown	Hunter Kill
1954	Taylor Pk	1	Unknown	Hunter Kill
1954	Silverbutte Cr	1	Unknown	Hunter Kill
1954	Silverbow Cr	1	Adult Female	Hunter Kill
1955	Wolf Cr	1	Adult Male	Control (Depredation)
1955	Mt. Headley	1	Subadult	Nuisance
1955	Baree Lk	1	Adult Male	Unknown
1955	Baree Lk	1	Adult Female	Unknown
1955	Bear Cr	1	Subadult Male	Hunter Kill
1958	Squaw Cr	1	Adult Female	Nuisance
1959	E F Rock Cr	2	Adult Female, 1 Cub	Hunter Kill
1959	W F Thompson R	4	Adult Female, 3 Cubs	Unknown
1959	Cliff Cr	1	Unknown	Unknown
1960	Prospect Cr	2	Adult Female, 1 Cub	Unknown
1964	Graves Cr	2	Subadults	Unknown
1964	Wanless Lk	3	Subadults (Adult Wounded)	Unknown
1965	Snowshoe Cr	2	Subadults	Unknown
1968	Bear Cr	1	Adult Female	Illegal Kill
1968	Granite Cr	1	Subadult Male	Nuisance
1969	Priscilla Pk	1	Adult Female	Unknown
1970	Thompson R	1	Unknown	Unknown
1970	Cameron Cr	1	Subadult Male	Unknown
1970	Squaw Cr	2	Adult Female, Subadult Female	Nuisance
1971	Murr Cr	1	Adult Female	Unknown
1972	Rock Cr	1	Subadult	Mistaken Identity
1974	Swamp Cr	1	Adult Male	Hunter Kill
1977	Rabbit Cr	1	Adult Male	Unknown
1985	Lyons Cr	1	Adult Male	Defense of Life
1986	Burnt Cr	1	Cub	Unknown
1987	Flattail Cr	1	Female Cub	Mistaken Identity
1988	Lewisby Cr	1	Adult Male	Hunter Kill
1988	N F 17-Mile Cr	1	Adult Female	Defense of Life
1989	Burnt Cr	1	Subadult Female	Trap Mortality (Predation)
1990	Poverty Cr	1	Subadult Male	Unknown

Appendix 6

Black Bear Depredation Actions
1967-1990



Taken from ADC disposition reports.

Appendix 7.

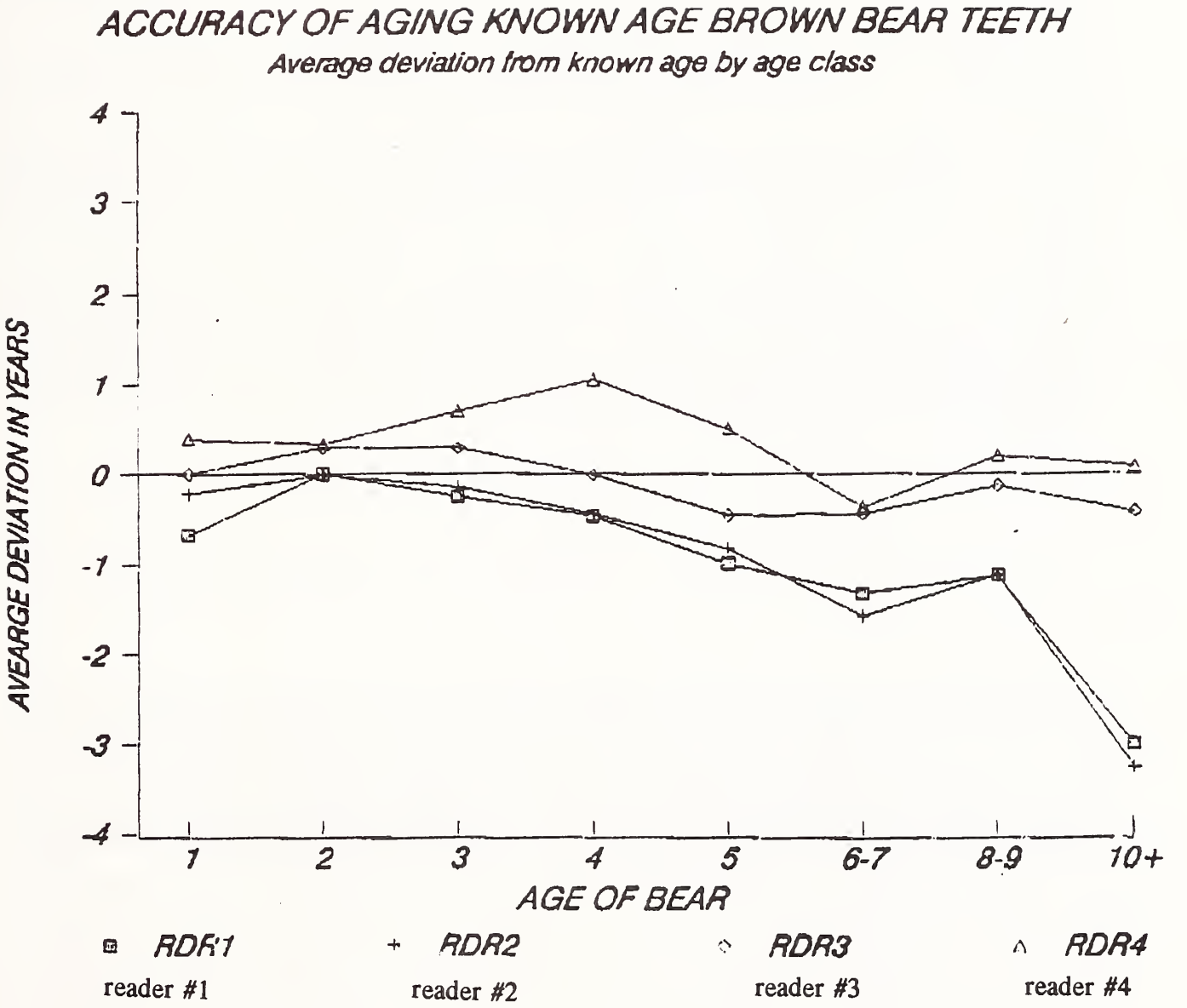


Figure 1. Accuracy of assigned age of premolar sections from 85 known-age grizzly bears, as determined by four readers using the cementum analysis technique (from Matson et al 1993).

Table 1. Statewide Bear Harvest Statistics.

Region	Ave. Harvest 1971-91	% Harvest by Region	% Females in Harvest 85-91
1	723*	49*	31.5*, 37.5**
2	361	25	33.4, 38.7
3	211	14	32.8, 40.5
4	128	9	35.4, 37.4
5	50	3	41.9, 42.9
Statewide	1474	100	32.8, 38.5

*Questionnaire survey information.
**Based on tooth turn-in data.

Table 2. Percent Females Harvested (% of total Harvest), Based On Tooth Return Information.

Region	1985	1986	1987	1988	1989	1990	1991
1	39	38	35	34	37	40	35
2	39	44	35	41	36	36	32
3	32	33	40	40	50	47	38
4	30	39	42	38	44	40	42
5	46	36	53	60	43	34	47
State	38	39	38	37	38	40	36

Table 3. Median Ages of Females in Harvest (tooth data).

Region	1985	1986	1987	1988	1989	1990	1991
1	4.5	5.5	6.5	5.5	5.5	5.5	3.5
2	4.5	5.5	4.5	4.5	4.5	5.5	5.5
3	5.5	6.5	5.5	6.5	6.5	4.5	6.0
4	5.0	4.5	6.5	3.5	6.5	6.5	4.5
5	6.5	5.5	7.5	5.5	5.5	7.0	8.5

Table 4. Median Ages of Males in Harvest (tooth data).

Region	1985	1986	1987	1988	1989	1990	1991
1	3.5	4.5	4.5	5.5	3.5	4.5	3.5
2	4.5	3.5	4.5	4.5	3.5	3.5	3.5
3	4.5	3.5	4.5	4.5	5.5	4.5	5.5
4	3.5	3.5	4.5	3.5	3.5	4.5	3.5
5	4.5	3.5	4.0	6.0	4.5	3.5	4.5

Table 5. Harvest Age Ratios, Statewide, 1985-1991. (tooth data, % of total harvest)

	Adult Male	Ad. Female	Sub Male	Sub Female
1985	23.2	18.4	39.3	19.9
1986	24.5	22.1	37.0	17.0
1987	27.5	22.2	34.9	15.8
1988	28.2	20.2	34.3	18.1
1989	23.2	21.0	38.8	16.8
1990	24.5	21.4	35.5	18.8
1991	25.4	18.2	39.2	18.1
Ave.	25.1	20.6	37.0	17.8

Table 6. Median Ages of Female Black Bears by Season.

Region	Season	85	86	87	88	89	90	91
1	Spring	4.5	6.5	6.5	5.5	7.5	5.5	3.5
1	Fall	4.5	4.5	5.5	3.5	3.5	5.5	4.5
2	Spring	5.5	5.5	7.5	6.5	5.5	6.5	5.5
2	Fall	4.5	5.5	4.5	3.5	3.5	3.5	5.5
3	Spring	7.0	5.5	6.0	6.5	6.5	5.5	7.5
3	Fall	4.5	8.5	5.5	5.5	5.5	4.5	4.5
4	Spring	6.5	4.5	6.5	5.5	5.5	6.5	5.5
4	Fall	3.0	3.5	6.5	3.0	6.5	5.5	3.5
5	Spring	7.5	4.5	7.5	5.5	5.5	6.0	8.5
5	Fall	4.0	7.0	N/A	N/A	5.5	9.5	7.5

Table 7. Median Ages of Male Black Bears by Season.

Region	Season	85	86	87	88	89	90	91
1	Spring	4.5	5.5	5.5	5.5	5.5	6.0	4.5
1	Fall	2.5	2.5	3.5	2.5	2.5	2.5	3.5
2	Spring	5.5	4.5	6.5	5.5	4.5	5.5	4.5
2	Fall	3.5	2.5	3.5	2.5	2.5	2.5	2.5
3	Spring	4.5	4.5	5.5	4.5	5.5	5.5	5.5
3	Fall	2.5	3.5	3.5	3.0	3.5	3.5	3.5
4	Spring	4.0	5.5	4.5	3.5	3.5	5.5	4.5
4	Fall	2.5	3.5	3.5	3.5	2.5	3.5	2.0
5	Spring	4.5	3.5	4.0	6.0	4.5	3.5	5.5
5	Fall	2.5	3.5	N/A	N/A	3.5	2.0	3.0

APPENDIX 8.

Table 1. Criteria used to monitor black bear harvest in Idaho.

Criteria	Overharvest[a]	Desired Level[b]
Percent females	≥40%	≤35%
Median age	≤3 yrs	≥5 yrs
Males	≤2 yrs	≥4 yrs
Females	≤4 yrs	≥6 yrs
Bait Station Survey	Declining	Stable or Increasing

[a] Reflects an overharvested population.

[b] Reflects a self-sustaining, viable population with a diverse age structure.

Appendix 9.

STATUTES

STATE OF MONTANA

DEPARTMENT OF FISH, WILDLIFE, AND PARKS

87-1-231. Tattooing of bears, wolves, tigers, mountain lions, or coyotes — when required — penalty. (1) Any bear, wolf, tiger, mountain lion, or coyote that is captured alive to be later released or which is held in captivity for any purpose must be reported to the department within 3 days of the capture or commencement of captivity. If a person capturing or holding in captivity such animal fails to report an animal as required by this section, such failure is a misdemeanor punishable as provided in 87-1-102.

(2) Each animal reported as required in subsection (1) shall be permanently tattooed or otherwise permanently identified in a manner that will provide positive individual identification of such animal. No tattoo is required under this section if the animal is subject to a permanent, individual identification process by another state or federal agency.

(3) Any person holding a bear, wolf, tiger, mountain lion, or coyote in captivity shall immediately report to the department any death, escape, release, transfer of custody, or other disposition of such animal.

History: En. Sec. 1, Ch. 566, L. 1985.

87-1-232. Tattoo records. (1) The department shall maintain a record of each animal reported to it pursuant to 87-1-231. The record shall indicate:

(a) the person by whom the animal was captured or is held in captivity;

(b) the location of the capture or captivity;

(c) the date the animal was tattooed;

(d) the purpose of the captivity or capture; and

(e) any death, escape, release, transfer of custody, or other disposition of such animal.

(2) The department shall establish by rule a fee to be charged, which may not exceed the administrative cost of maintaining the record required by this section.

History: En. Sec. 2, Ch. 566, L. 1985.

87-1-233. Compensation for damage caused by animal held in captivity. If any bear, wolf, tiger, mountain lion, or coyote that is held in captivity or that escapes from such captivity causes any damage to the personal property of another person, compensation for such damage must be paid by the person holding or who held the animal in captivity.

History: En. Sec. 3, Ch. 566, L. 1985.

87-1-234. Exceptions to tattoo and compensation requirements. Sections 87-1-231 through 87-1-233 do not apply to those animals:

(1) captured and released as part of an ongoing game management program or an ongoing predator control program unless such animals have been involved in livestock killing; or

(2) captured and released as part of a scientific, educational, or research program as certified by the department.

History: En. Sec. 4, Ch. 566, L. 1985.

87-3-101. General restrictions. Except as provided in 87-2-803(4), it is unlawful for anyone to take, capture, shoot, kill, or attempt to take, capture, shoot, or kill any game animal or game bird:

(1) from any self-propelled or drawn vehicle;

(2) on, from, or across any public highway or the shoulder, berm, or borrow-pit right-of-way of any public highway, as defined in 61-1-202, in the state of Montana; or

(3) by the aid or with the use of any set gun, jacklight or other artificial light, trap, snare, or salt lick; nor may any such set gun, jacklight or other artificial light, trap, snare, salt lick, or other device to entrap or entice game animals or game birds be used, made, or set.

History: En. Sec. 14, Ch. 238, L. 1921; re-en. Sec. 3694, R.C.M. 1921; amd. Sec. 5, Ch. 77, L. 1923; amd. Sec. 15, Ch. 192, L. 1925; amd. Sec. 12, Ch. 59, L. 1927; amd. Sec. 1, Ch. 162, L. 1931; amd. Sec. 1, Ch. 159, L. 1941; amd. Sec. 5, Ch. 224, L. 1947; amd. Sec. 1, Ch. 157, L. 1949; amd. Sec. 1, Ch. 126, L. 1951; amd. Sec. 1, Ch. 223, L. 1953; amd. Sec. 1, Ch. 193, L. 1955; amd. Sec. 1, Ch. 53, L. 1963; amd. Sec. 1, Ch. 34, L. 1967; amd. Sec. 1, Ch. 90, L. 1969; amd. Sec. 1, Ch. 201, L. 1969; amd. Sec. 1, Ch. 177, L. 1971; amd. Sec. 1, Ch. 124, L. 1973; amd. Sec. 1, Ch. 305, L. 1973; amd. Sec. 1, Ch. 108, L. 1975; amd. Sec. 1, Ch. 152, L. 1975; amd. Sec. 9, Ch. 9, L. 1977; amd. Sec. 1, Ch. 196, L. 1977; amd. Sec. 3, Ch. 235, L. 1977; amd. Sec. 1, Ch. 400, L. 1977; amd. Sec. 13, Ch. 417, L. 1977; amd. Sec. 1, Ch. 485, L. 1977; R.C.M. 1947, 26-301((1)(a) part); amd. Sec. 2, Ch. 214, L. 1985; amd. Sec. 3, Ch. 416, L. 1985; amd. Sec. 152, Ch. 370, L. 1987.

87-3-102. Waste of fish or game. (1) A person who is responsible for the death of a black or brown bear or a mountain lion commits the offense of waste of game if he abandons the head or hide in the field.

(2) A person who is responsible for the death of a grizzly bear commits the offense of waste of game if he abandons the head or hide or any parts required by department or commission regulation for scientific purposes. All parts of a grizzly bear required by department or commission regulation for scientific purposes must be delivered to an officer or employee of the department for inspection as soon as possible after removal, and the department shall return to the licensee any bone structure and skull within 1 year upon written request. The hide must be returned immediately.

(3) A person responsible for the death of any game animal, except grizzly, black, and brown bear and mountain lion, commits the offense of waste of game if he:

(a) detaches or removes from the carcass only the head, hide, antlers, tusks, or teeth or any or all of aforesaid parts;

(b) wastes any part of any game animal, game bird, or game fish suitable for food by transporting, hanging, or storing the carcass in a manner that renders it unfit for human consumption; or

(c) abandons in the field the carcass of any game animal or any portion of the carcass suitable for food.

(4) A person in possession of a game animal or game animal parts, game bird, or game fish suitable for food commits the offense of waste of game if he:

(a) purposely or knowingly transports, stores, or hangs the animal, bird, or fish in a manner that renders it unfit for human consumption; or

(b) disposes of or abandons any portion of a game animal, game bird, or game fish that is suitable for food.

(5) A person convicted of waste of game shall be fined not less than $50 or more than $1,000 or imprisoned in the county jail for a term not to exceed 6 months, or both.

History: En. Sec. 15, Ch. 238, L. 1921; re-en. Sec. 3696, R.C.M. 1921; amd. Sec. 7, Ch. 77, L. 1923; amd. Sec. 16, Ch. 192, L. 1925; amd. Sec. 13, Ch. 59, L. 1927; amd. Sec. 1, Ch. 112, L. 1931; re-en. Sec. 3696, R.C.M. 1935; amd. Sec. 1, Ch. 160, L. 1941; amd. Sec. 1, Ch. 178, L. 1955; amd. Sec. 1, Ch. 40, L. 1961; amd. Sec. 3, Ch. 134, L. 1969; amd. Sec. 1, Ch. 162, L. 1973; amd. Sec. 13, Ch. 417, L. 1977; R.C.M. 1947, 26-307(1); amd. Sec. 5, Ch. 277, L. 1991.

Compiler's Comments

1991 Amendment: Inserted (1) and (2) regarding waste of bear or mountain lion; substituted (3) regarding waste of animals other than bear or mountain lion for former language (see 1989 MCA for text); inserted (4) regarding waste of animal suitable for food; inserted (5) providing a penalty for waste of game; and made minor changes in style. Amendment effective July 1, 1991.

87-3-127. Taking of stock-killing animals. (1) Livestock owners or employees of the department or the federal fish and wildlife service may use dogs in pursuit of stock-killing bears, stock-killing mountain lions, and stock-killing bobcats. Other means of taking stock-killing bears, stock-killing mountain lions, and stock-killing bobcats may be used except the use of the deadfall.

(2) Traps used in capturing bears shall be inspected twice each day with the inspections 12 hours apart.

History: En. Sec. 14, Ch. 238, L. 1921; re-en. Sec. 3694, R.C.M. 1921; amd. Sec. 5, Ch. 77, L. 1923; amd. Sec. 15, Ch. 192, L. 1925; amd. Sec. 12, Ch. 59, L. 1927; amd. Sec. 1, Ch. 162, L. 1931; amd. Sec. 1, Ch. 159, L. 1941; amd. Sec. 5, Ch. 224, L. 1947; amd. Sec. 1, Ch. 157, L. 1949; amd. Sec. 1, Ch. 126, L. 1951; amd. Sec. 1, Ch. 223, L. 1953; amd. Sec. 1, Ch. 193, L. 1955; amd. Sec. 1, Ch. 53, L. 1963; amd. Sec. 1, Ch. 34, L. 1967; amd. Sec. 1, Ch. 90, L. 1969; amd. Sec. 1, Ch. 201, L. 1969; amd. Sec. 1, Ch. 177, L. 1971; amd. Sec. 1, Ch. 124, L. 1973; amd. Sec. 1, Ch. 305, L. 1973; amd. Sec. 1, Ch. 108, L. 1975; amd. Sec. 1, Ch. 152, L. 1975; amd. Sec. 9, Ch. 9, L. 1977; amd. Sec. 1, Ch. 196, L. 1977; amd. Sec. 3, Ch. 235, L. 1977; amd. Sec. 1, Ch. 400, L. 1977; amd. Sec. 13, Ch. 417, L. 1977; amd. Sec. 1, Ch. 485, L. 1977; R.C.M. 1947, 26-301(part (5)(a)).

Appendix 10.

August 17, 1987

MONTANA DEPARTMENT FISH, WILDLIFE AND PARKS

GUIDELINES FOR CONTROLLING NUISANCE BLACK BEAR

Human/black bear conflicts may occur in Montana wherever black bears and humans are found together. Conflicts may occur regardless of bear densities; however, they often intensify where increasing bear and/or human populations occur in rural areas. Periodic shortages of natural bear foods such as huckleberries and chokecherries, may also result in black bear/human conflicts.

Although black bears are typically timid animals, they can be dangerous in some situations and are capable of causing property damage, killing livestock and threatening people. In addition, humans have a variety of attitudes and responses to bears, which may encourage or discourage human/bear conflicts.

The department utilizes three major strategies for addressing human/black bear conflicts.

1. Hunting seasons are implemented in those areas where black bear populations are healthy enough to sustain harvest. It is expected that hunting black bears reduces conflicts with humans by keeping bear densities below maximum and making bears more wary of humans.

2. Public information efforts are directed at educating the public in ways that people can foresee and minimize their conflicts with bears. These include removal and proper storage of attractants such as human and livestock foods, carrion, garbage, game meat and fruit. Other examples are relocation, electric fencing or elevation of beehives, bear proofing garbage containers, disposal of animal carcasses away from livestock or residences, early and timely removal of fruit trees and bushes and not locating subdivision and other developments in areas of high seasonal use by bears.

3. Removal of a black bear from a situation is sometimes necessitated by either the nature of the bears "offense" or the response of the people involved. Montana laws 87-7-101, 87-7-102, 87-1-225, 87-3-127, 87-3-130, 87-1-231, 87-1-232, 87-1-233, 87-1-234 give the department authority and direction for dealing with complaints about black bears. In compliance with legislative direction, the department has formulated guidelines for dealing with those complaints. A summary of these guidelines is as follows:

a) All department responses to beehive depredation complaints will follow Beehive Guidelines of May 7, 1987. Under Montana law bees are livestock.

b) Bears that attack humans resulting in injury or loss of life will be destroyed.

c) Bears that attack livestock resulting in injury or death of animals will be destroyed. The law also provides that livestock owners or U. S. Fish and Wildlife Service, when requested, may take stock killing bears.

d) When bears display a potential threat to human safety, the area will be signed or the bear will be trapped, marked and relocated for first offense. For the second offense, adult or sub-adult male bears will be destroyed or harvested by a hunter if during open season. Adult females of productive age or females with young of year can be relocated on the second offense if determined by the regional supervisor to be necessary. No bears will be relocated a third time.

e) When bears use human or livestock foods, garbage, game meat or carrion, efforts will be made to remove the attractant. If the problem persists, or the attractant cannot be removed, the bear will be trapped and relocated, or, if during a hunting season, a hunter may be called on to harvest the bear. On its second offense of this nature, adult and sub-adult male bears will be destroyed. Adult females of productive age or females with young of year can be relocated on the second offense if determined by the regional supervisor to be necessary. Young of year will be relocated if not directly involved with incident. Young of year directly involved or too small to relocate will be sent to a zoo, if available.

f) All bears relocated will be marked with nuisance bear ear tags or permanently marked in a manner so they can be identified in subsequent captures. Methods of marking which do not require drugging the bear are preferred if available. Records of marked bears will be kept at the regional level.

g) If salvageable and in an area accessible, the complete hide with claws will be taken from bears destroyed and sent to the Bozeman Laboratory for

processing. In addition, a premolar will be taken for aging purposes and returned to the wildlife manager in the region of kill.

g) Release sites of nuisance black bears will preferably be at least 50 miles away, in a different mountain range, in an area of low bear density with low potential for livestock interaction. Nuisance black bears will not be released in an area of known chronic bear problems. Each region is responsible to develop a list of potential relocation sites to release nuisance black bears. The list will be reviewed and updated annually before April of each year.

i) Department contacts for these guidelines are Glenn Erickson, Wildlife Division and Bob Bird, Enforcement Division. The regional supervisor is responsible for implementation of these guidelines. Decisions required for implementation rest with the regional supervisor or his designee.

Approved by James W. Flynn
James W. Flynn
Director

September 5, 1987

908.4

GUIDELINES FOR BEAR DEPREDATION OF BEEHIVES

Bear depredation to beehives is considered a specialized depredation problem. Consequently, the following guidelines are considered a supplement to the existing, more extensive game damage guidelines dated September 30, 1985. Existing statutes and rules classify bees as livestock. Bees must, therefore, be included with other livestock in statutes which address predation and other problems related to livestock (87-3-127 and 87-3-130). These statutes allow livestock owners to shoot, trap or chase with dogs any bears that have destroyed, or are threatening to destroy beehives. These statutes do not supercede private property rights. Landowners may prevent bears from being killed by both beekeepers and Department personnel by preventing access to their property.

1. All bear depredation complaints to the Department will be investigated within 48 hours (87-1-225). Complaints by beekeepers should be made to local ADC agents or Department of Fish, Wildlife and Parks' personnel. "First contact" individuals or procedures may vary locally. Coordination with ADC relative to bear-bee issues will be accommodated at regional level by Regional Supervisor.

2. All bears known by the Department to have destroyed beehives will be killed in compliance with Department policy. When the Department responds to a verified beeyard damage complaint where bees have been killed by the bear, killing the bear is the only alternative. Beekeepers must have permission of the landowner to kill depredating bears on property other than their own.

3. Beekeepers may shoot, trap, snare or chase with dogs, any bears that have destroyed, or are threatening to destroy beehives (87-3-127; 87-3-130). Beekeepers must have reasonable evidence that bears killed have caused damage and avoid the killing of "innocent" bears. Any bears killed by landowners or beekeepers shall be reported to the Department as soon as practical and no later than 72 hours (87-3-130). After report of a bear kill, FWP personnel will complete the depredation report and the necessary parts and data will be obtained (e.g. tooth, claws, skull).

4. Trapping or snaring of bears by beekeepers must occur within 50 feet of beehives. Snares should only be used after damage has occurred. All traps and snares must be checked at least every 12 hours (87-3-127).

5. Beekeepers using a beehive within 50 feet of an active, occupied registered beeyard, for the purpose of trapping, snaring or shooting depredating black bears, are not baiting as defined under state law (87-3-101).

6. Bears caught by agency personnel in culvert or live traps in the general vicinity of beeyards, but not known to have actually caused damage, will be held up to 12 hours in the trap so that stools may be inspected for evidence of having caused damage to beehives.

7. Live-trapped bears showing evidence of having caused depredation on beehives will be killed.

8. Live-trapped bears that do not display evidence of having caused beehive damage, and have no history of other nuisance problems, may be relocated under the following circumstances and in compliance with 87-1-231 to 234.

   A. All relocated nuisance black bears will be marked with special "nuisance bear" eartags; records of marked bears will be kept at the regional level; proper distribution of "nuisance bear" eartags will be the responsibility of the Regional Supervisor.

   B. Grizzly bear relocation will follow the IGBC Nuisance Bear Guidelines;

   C. Release sites of nuisance black bears will preferably be at least 50 miles away, in a different mountain range, in an area of low bear density and not in an area of known chronic bear problems. It is recognized that it may not always be possible to meet all of these criteria. Selection of areas for relocations will be the responsibility of the Regional Supervisor.

9. When possible, hunters will be utilized in removing known damage-causing bears during open bear hunting season. A hunter roster for damage hunts will be considered on a region by region basis and will be the responsibility of the Regional Supervisor.

10. The Department will work towards refining of techniques for the protection of beeyards from depredating bears. As new technology becomes available, information will be passed on to beekeepers. New techniques may be pilot tested with cooperating beekeepers.

11. The Department will consider cost-sharing protective structures in certain situations. In "chronic" bear problem areas, the Department will provide a charger to beekeepers who wish to protect their beeyards with electrified fences and who are willing to purchase the materials and erect and maintain such a fence.

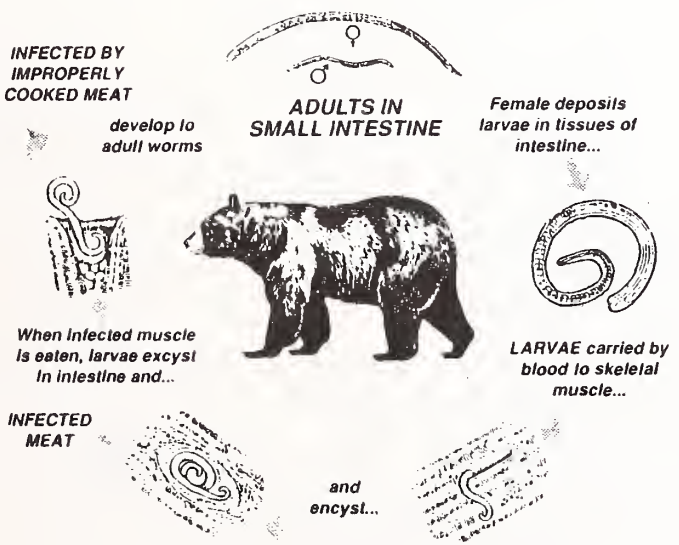
12. Other options, such as moving beeyards, should be considered when trying to reduce chronic bear problems. Beekeepers will be encouraged to prevent bear depredation problems whenever possible.

13. The Field Services Division will be responsible to maintain an active liaison with the Beekeepers Association to mutually seek preventative measures to protect beehives and discourage bears from damaging hives.

Contact individuals relative to these guidelines are Glenn Erickson, 444-2612; Gene Allen, 444-2602; Bob Bird, 444-2452.

GA/ph
508/27

LIFE CYCLE of TRICHINELLA SPIRALIS


INFECTED BY IMPROPERLY COOKED MEAT
develop to adult worms
ADULTS IN SMALL INTESTINE
Female deposits larvae in tissues of intestine...
When infected muscle is eaten, larvae excyst in intestine and...
LARVAE carried by blood to skeletal muscle...
INFECTED MEAT
and encyst...

Can Trichinella be controlled in Bears?

Eradication of *Trichinella* in wildlife is unlikely because scavenging and predation are the principal mechanisms of transmission. For bears these are natural and essential feeding strategies. Many other carnivores including mountain lion, wolverine, pine marten, lynx, bobcat, fisher, otter, coyote, weasel, badger, and fox also act as a reservoir for *Trichinella* larvae.

What can I do to prevent getting Trichinosis?

If you hunt and eat bear meat some simple precautions will prevent infection. Thorough cooking of the meat at temperatures exceeding 165° F. will kill the larvae. However, freezing will not kill the organism. Curing by itself will also not kill larvae but curing along with smoking seems to kill the parasite.

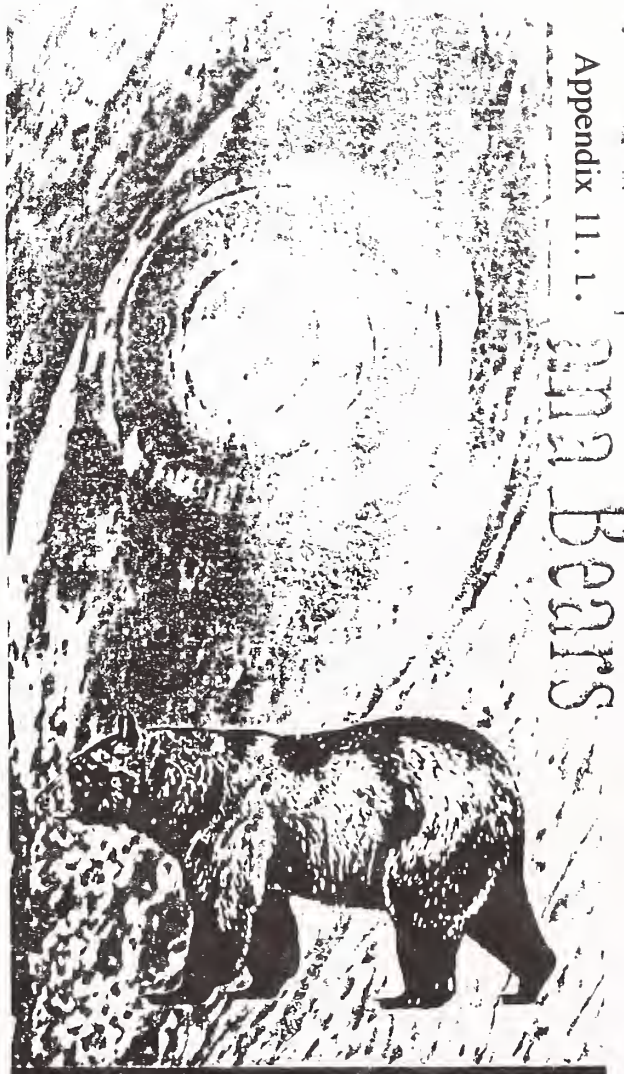
Meat samples from hunter killed bears can be tested at the MSU Veterinary Molecular Biology Laboratory. Samples can be submitted for free testing through MDFWP offices and personnel or can be mailed to:

D. E. Worley
Vet. Molecular Biology
Montana State University
Bozeman, MT 59717

To submit a sample cut a 4-5 inch portion from the tongue. If tongue isn't available cut a golfball-sized piece of muscle from the head or leg. Place the sample in a plastic bag labeled with the date of kill, location of kill, sex of bear, and your address and phone number. You will be notified of the results within 2-4 days. Special mail kits for submitting samples are available at Montana Dept. of Fish, Wildlife & Parks Regional offices.

Trichinosis

Appendix II. I. and Bears



Montana Department of Fish, Wildlife and Parks
MSU Veterinary Molecular Biology
MSU Extension Service

What is Trichinosis?

Trichinosis is a parasitic disease of humans and other mammals which results from ingestion of larvae of the muscleworm (*Trichinella spp.*) in infected animal tissue. The nematode responsible for this infection was first discovered in the muscles of a human patient in 1835. The mode of infection was studied extensively during the latter part of the 19th century and was found to consist of a unique life cycle in which all stages of the parasite occur in a single host.

How is Trichinosis acquired?

Trichinosis in wild animals has been studied extensively; at least 22 species of carnivorous mammals and a few predatory birds have been implicated in the transmission of the infection in North America. Predation and scavenging are thought to be the two principal mechanisms by which the infection is acquired. Carcasses of infected carnivores are the major source of exposure for wildlife and humans. In Montana, bears are implicated as the greatest potential source of infection since many are consumed by hunters each year. More than 10 % of human trichinosis cases in the United States are traced to infected bear meat.

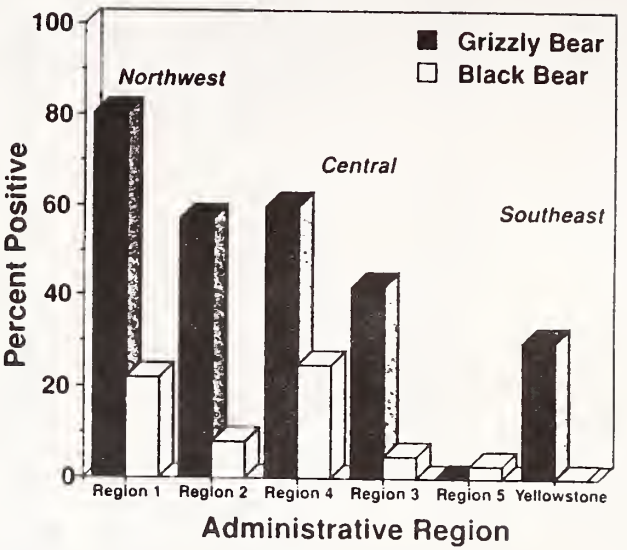
How prevalent is Trichinosis in Montana Bears?

Extensive testing of black and grizzly bears during cooperative studies by MSU and MDFWP has been conducted during the past 30 years. Over 500 black bears and 300 grizzly bears were tested. Sixty-four percent of the grizzly bears and 15 percent of the black bears have tested positive for trichinosis. The older a bear is the more likely that it will have been infected. Most bears over 15 years of age are infected.

photos by W.J McRae

There is also a gradient of prevalence in Montana bears with high infection rates in the northwest and lower infection rates in the southcentral portions. Counties with high prevalence include Flathead, Lincoln and Sanders counties in northwestern Montana.

BEAR INFECTION RATES
in Montana



What are the symptoms for Trichinosis in humans?

Adult worms in the intestine during the early stages of the disease produce symptoms resembling food poisoning, i.e., severe diarrhea. As larvae enter the circulation and migrate through skeletal muscles and other tissues, elevated body temperature, toxemia, focal hemorrhages and eosinophilia become evident. Ten to 30 days after exposure severe muscle pain, stiffness of the neck, swelling around the eyes and inflammation occur. There is currently no effective treatment for the intramuscular stage of the disease. In bears, a response similar to larval migration in the tissues occurs, but acute disease has not been observed in experimentally infected animals.

APPENDIX 12.

This appendix includes copies of written and telephone comments received during the public comment period on the draft black bear EIS (November 7 - December 8, 1993) as well as input received during public hearings in Kalispell, Helena and Billings. The appendix also includes a FWP response to substantive comments received on the draft EIS. Substantive comments are those that question analyses or procedural steps. Where appropriate, revisions to the text of the draft EIS have been made in response to substantive comments.

Statements of support or objections to a particular element or issue and other personal opinions are acknowledged by being reproduced. However, FWP cannot otherwise respond to these kinds of comments.

Each substantive comment has been assigned a number corresponding to a letter or phone call (numbered consecutively in the order that they were received), or a letter designating the town where a hearing was held, followed by a comment number. for example, the second comment in the eighth letter would be designated 8-2. Similarly, all comments received during the Kalispell hearing are designated by a "K".

KALISPELL HEARING November 17, 1993

Attendees:

Arlene Montgomery — Friends of the Wild Swan
P.O. Box 5103, Swan Lake, MT 59911
Jim Williams — FWP employee
630 10th St. W., Kalispell 59901
Douglas Mead 222 N. Foy's Lake Dr., Kalispell 59901
Bob and Jinny Curtiss — Backcountry Horsemen of the Flathead
P.O. Box 1133, Marion, MT 59925
Mark Rogers 225 Edgewood Dr., Kalispell
Michael Ware — MFMU
61 Harbin Hill Rd., Kalispell
Tim Geis
Canyon Archery, Columbia Falls
Bob Cheff — United Bowhunters of Montana
Box 6, Columbia Falls
Paul Olbert 463 2nd Ave. W.N., Kalispell
Bob Prischman 168 2nd Ave. E.N., Kalispell
Wayne Jacobsmeyer P.O. Box 1718, Columbia Falls
Bruce Babcock 2668 Hwy 2 E., Kalispell
John Easton 3965 MT Hwy 35, Kalispell

Bob Lane served as hearing officer. Heidi Youmans and Jim Cross were there to answer questions about the DEIS, bear populations and bear management. John Fraley was present, as well as Commissioner Charlie Decker.

----------HEARING----------

John Eastman: Page 20 is a long page on baits and hounds. My opinion is that with use of hounds, we can very well distinguish between males and females. I have never known a sow not to know where her cubs are at the end of a chase. We don't care to kill bears but we would like a chase season. Houndsmen could be a lot of help to the Department (providing information about bear populations).

Douglas Mead: I am basically in favor of the proposed action but would like clarification of paragraph S on page 29 (it looks like the Department is assuming authority for determining land use on all lands) and W on page 31 (who is responsible for developing a definition of baiting?). K1

Mike Ware: How are land use restrictions (road closures) affecting black bear harvest? K2

Commissioner Decker: Is reseeding of clover and other palatable forage along logging roads serving as an attractant to bears - and could that be considered baiting? K3

Bob Cheff: What is your definition of permanent road closures? In K4

my mind, any road closed with a gate is not permanently closed because gated roads are used by agency personnel and others.

Commissioner Decker: Why didn't we evaluate bear predation on elk calves and fawns? We should have a better handle on mortality of elk calves in calving areas.

An unidentified participant stated that he spent a lot of time in the North Fork of the Flathead this summer and saw several elk herd comprised only of cows and bulls --- no calves.

John Bartlett: In dealing with depredation bears that have to be caught, will the Department pursue them with hounds? Will the general houndsmen be able to do it? Will "cooperator houndsmen" could subcontract with other houndsmen?

Bruce Babcock: Fig. 2 on page 38 shows a decline in black bear harvest. It may suggest to the reader that there is a biological or population concern. Need to state if that is or is not a problem. May display the wrong perception.

HELENA HEARING: NOVEMBER 19, 1993

Don Childress served as hearing officer. Heidi Youmans was present to answer questions about the DEIS. Commission chairman, Stan Meyers attended. Tim Wheel (P.O. Box 4747, Helena) was the only citizen who attended to testify.

----------HEARING----------

Can black bears get rabies, and can eating bear meat be a means to contact rabies? H1

Tim Wheel stated that he is opposed to mandatory use of bear meat. He had contacted Dr. Dave Worley at MSU who told him that there is no known cure for trichinosis. Altho it can be treated in the early stages, it is rarely detected until the advanced stages, at which point there is no cure. He said that Dr. Worley stated that it is questionable whether microwaving can kill the larvae. He thought that the rotisserie type microwave would be more likely to kill larvae than other kinds of microwave ovens but he wouldn't put his faith in that. Tim Wheel stated that he thinks black bears should be maintained as a trophy animal rather than a game animal and that use of bear meat should remain voluntary.

Tim Wheel expressed the concern that the DEIS does not address what will happen if pending legislation bans the use of the types of guns used by hunters. He is concerned about gun control and stated that the current administration would like to ban all firearms - and place prohibitive taxes on ammunition at the very least. These measures could mean an end to hunting. He said that there was consensus among Montana's congressional team that it won't happen any time soon. He also asked the NRA about a ban on guns and tax on ammunition. If it is not in the EIS and that happens, black bear management could be affected. If hunting is banned the animals will still have to be kept under control. California eliminated lion hunting and now they have lions in L.A. Since Colorado eliminated spring bear hunting, they're getting bears coming out of the woodwork. H2

Stan Meyer asked what is the incidence of trichinosis in black bears? H3

What is the reason for the element requiring mandatory use of meat? H4

Why are we doing this EIS? H5

Concerned about state liability in the event that bear meat tests positive for trichinosis. If bear meat tests positive for trichinosis, is hunter required to eat it? How should such meat be disposed of? H6

Is hunting in areas of natural food sources baiting? H7

If the bear license is taken out of the sportsman license, will the price be reduced? If not, wouldn't that risk a decline in license sales?

Comments on Draft EIS on
Management of Black Bears in Montana

1.) I'm adamantly opposed to the mandatory use of contaminated bear meat by hunters and their families. In talking with Doctor Dave Worley of MSU, it became quite clear to me that there is no known cure for Trichinosis in its late stages of development. In its earlier stages, however, it is treatable but rarely detected. It's also questionable as to whether microwaving will kill Trichinosis. I think, therefore, that black bears should remain a trophy animal rather then upgrading them to a game animal with the use of bear meat as an option.

2.) I am greatly concerned that this EIS does not address the very real possibility that this Congress and/or the present administration will make a move in the near future to <u>BAN ALL</u> types of firearms or at the very least pass a bill placing exorbitant taxes on ammo thereby having a negative impact on black bear management, i.e. no more hunting. I have called and talked with the

staff members of our Congressional team and the consensus seems to be that this possibility probably will not happen anytime soon, however, with Senator Baucus voting for more gun control "anytime soon" maybe sooner then we think. I have also called and talked with the National Rifle Association about the possibility of a national gun ban or exorbitant taxes on ammo and while they thought it would be very tough to pass such legislation it would not be impossible either. Therefore, I think this EIS should address the very real possibility that a gun ban or ammo tax WILL pass and how WILL this legislation affect black bear management.

TIM WHEEL
P.O. BOX 4747
HELENA, MT 59604

BILLINGS HEARING, November 23, 1993

Attendees:

Andy Drange — Drange Apiaries
2751 Alpine View Dr., Laurel 59044
James Phelps — Yellowstone Valley Audubon Society
2110 Bradbrook Ct., Billings

Jim Darling served as hearing officer. Charlie Eustace attended to answer questions about the DEIS and black bear management.

James Phelps submitted written comment at the hearing and Andy Drange submitted a letter (printed with other written comments) subsequent to the hearing.

****

COMMENT FORM

****

NAME: JAMES PHELPS

ADDRESS: 2110 BRAEBROOK CT BILLINGS MT 59102

AFFILIATION: Yellowstone Valley Audubon Socy

Please provide your comments below. Attach additional sheets to this form if you wish.

The Yellowstone Valley Audubon Society is a member organization of the National Audubon Society and of the Montana Audubon Council. We have more than 500 members, most of whom are located in the geographical area represented by the name.

We are not opposed to hunting. We appreciate the efforts of the department to manage and monitor the population of black bear. We agree with the rationale (page 16) that bears should remain wary of humans.

No management plan is ever set in concrete. We support the goals of the draft EIS and management plan. We support the efforts to work with sheep producers and bee keepers to keep predation by bears to a minimum.

gen\com.for

#1

November 8th,1993

Don Childress, Administrator
Wildlife Division,FW&P
P.O. Box 200701
Helena, Mt. 59620-0701

Deer Mr. Childress,

After reading through the Draft EIS on Management of Black Bears in Montane, I concluded that the Department pretty carefully covered the major areas of concern in the management of bleckbears, and that the Alternative proposed is In the best interest of the bears with one exception.

The exception is the continued support of a spring hunt. The text of the report indicates the difficulty in determining the age end sex of a bear at e distance. This, iin turn must bring on added mortelity for femeles with cubs in the spring. Especially if the cubs ere not in sight. Given the fact thet reproduction does not kick in until the femele is six or seven years of ege it does not eppeer to be in the bears best interest to risk losing females in the spring. In addition to the loss of low reproducing femeles, there are the orphened cubs. The number of such spoken about in the report indicates that there is, indeed, unnecessary loss of female bears in the spring hunt.

Our experience with black bears began when we moved to the Bitter Root Valley in 1951, Scarcely e trip was made by foot or euto that we did not see one or multiple bears. That situation has sadly changed, and now we scarcely ever see one. Not thet I think the spring hunt is thecomplete cause of diminished numbers , but it must contribute to the scarcity. I do not support the use of quotas. Enforcing quotas is not easy and , I suspect, not so accurate, either.

Over all,I think that the Proposed Alternative is good and will be in the best interest of the bears in the long run, but I recommend abolishing spring hunts,

Sincerely,
Doris Milner

Doris Milner
65 Ricketts Road
Hamilton,Mt. 59840

#2

NOV 10 993

Montana Department of Fish, Wildlife & Parks

November 9, 1993

To: Don Childress
From: Bob Henderson
Subj: Draft EIS of Montana Black Bear Management

Having more than a passing interest in this program, I read this DEIS with a fairly critical eye.

My view, for what its worth, is that the Black Bear DEIS is a very good document. It's well organized and readable in so far as possible for MEPA documents. It demonstrates attention to public concerns, lucidly states the issues, alternatives, elements, and has good documentation.

A couple of comments:

Page 15, item 7 under alternatives scoping, regarding closing roads to reduce black bear vulnerability. I understand the arguement presented. But, I do think that somewhere in the DEIS we could go on record that we recognize that bears become increasingly vulnerable to legal and illegal harvest with improved access and that we would presue road management with appropriate land managers as a means of reducing vulnerability.

Page 22, element I, rationale regarding Sept. 15 fall opening. If I read Append. #2 (Figs 9 & 11) correctly, May 16-31 is the period of peak harvest of adult and subadult females, not Sept 1-15.

2-1

Page 24, element M, rationale of management targets. Necessary, difficult to explain, but well written and documented.

cc:Firebaugh

#3

11/15 telephone comments from
Joe Thompson, DVM
2500 Garfield St.
Missoula, MT 59801
543-3795

The DEIS does not address means to protect black bear populations other than restricting season length. Approaches like restricting humter numbers, raising license fees, raising fees for non-residents, eliminating non-resident hunters, requiring a guide for non-residents, etc., were not considered in the alternatives presented. Shortening the season should be the last resort.

3-1

We keep punching more roads into black bear habitat and don't do enough about addressing travel on those roads. Road hunting has increased. The decoy program is excellent to discourage road hunting. FWP should assume a leadership role in letting people know that road building limits black bear populations. Reducing vehicle travel, RVs and mountain bikes via gating roads would help to protect black bear populations.

The proposal addresses shortening black bear seasons - especially early in the fall. I would suggest the opposite. Have black bear seasons early and eliminate black bear hunting during the general deer/elk season. Much of the harvest that occurs during deer/elk season is opportunistic.

I want to see opportunity for serious bear hunters maintained and opportunistic hunting harvest reduced. Bear hunting opportunity could be increased in the early fall if black bear licenses are eliminated from the combination package and bear hunting during deer/elk season is eliminated. Among the alternatives presented, I would prefer #5. But other alternatives that could feature measures discussed in the first paragraph, could be preferable to #5.

#4

Don Childress, Administrator
Wildlife Division
Department of Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620

Box 245
Plains, Mt
59859

Dear Mr. Childress,

I have just finished reviewing the Draft EIS for Black Bear Mgmt. I am essentially in favor of Alternative 1 (your Proposed Alternative), except I am opposed to the bear license being removed from the Sportsmen's License, as discussed on the bottom of page 54.

I am aware, from this writeup, that at the present time none of the license fee for a Sportsman's License goes to help fund the bear management program. I also know that the Sportsman's License is a pretty good bargain. Right now, this license costs $54.00. The same licenses, if purchased individually, would cost $56.00.

My suggestion is the following:

Leave the bear license as part of the Sportsmen's License package, but increase the cost to $60.00. Earmark the extra $6.00 in cost to the black bear management program. Let the people, like myself, who elect to buy the Sportsman's License every year help pay for the bear program. While I do not specifically bear hunt, I'd like to retain the opportunity to take a bear, if the opportunity arises and if I desire to shoot it. I believe this is the case with a lot of people who purchase the Sportsman License. If I had to specifically purchase a bear license on an individual basis, I would not do so, because I do not specifically go bear hunting. Wouldn't it be better to get a few dollars from each Sportsman License to go to the bear mgmt program, than to lose those dollars entirely (which I believe will be the case with a lot of the roughly 17,000 Montana residents who buy the Sportsman License)?

You will note that I recommend the cost be raised to $60.00, instead of the $65.00 which would result if the full $11.00 black bear license fee was added to the Sportsman's License. The reason for this

is that the people who buy the Sportsmen's License have willingly chosen to participate in the DFW&P habitat protection program ($7 per license) and the upland game bird program ($2 per license). Since we chose to help financially support these programs (which the vast majority of Montana residents have chosen not to support), then perhaps it is appropriate for your Department to give us a small break in the cost of this license package. I doubt if most purchasers of the Sportsmen's License would protest having to pay an extra $5.00 or $6.00 to aid in black bear management. However, the full $11.00 increase may be just enough, in our very cost conscious society, to cause some people to quit buying the Sportsmen's License. In this case, the net result to the bear management program would be zero, since you are not now getting any funds for this purpose. However, the habitat protection program and the upland game bird program would both suffer, because fewer people would be supporting those programs through purchase of the Sportsmen's License.

Also, in my opinion, if you decide to remove the black bear license from the Sportsmen's License package, but leave the cost at $54.00, then you will see a majority of Sportsmen's License purchasers quit buying this license. The licenses represented by the package license, would only cost $45.00 (deer, fishing, conservation, elk, bird), while the Sportsmen's License would cost $54.00. I believe that most Montanan's are fairly financially conservative, and look for a "good deal" first and foremost. If they can support things like your habitat program at the same time, and still get a "bargain", they will do so. However, if they see that they can get the exact same licenses, and save $9.00, I think you will see the sales of Sportsmen's Licenses drop substantially. (After all, $9.00 represents

the value of about a case of rotgut beer for the average Montanan). A significant reduction in Sportsman License sales will result in a significant reduction in the amount of revenue DFW&P has to operate the habitat protection and upland game bird programs. DFW&P should fully assess this possibility to see if this is worth the risk.

I'd suggest looking at both of these scenarios from a human psychology standpoint. In the first one, leaving the bear license as part of the "package deal" but raising the cost a small amount, your customers may be a little upset. Heck, we all are when we see costs go up due to inflation or whatever. However, it is a very common thing to see the price of gas (or food, or beer, or rent, or hunting licenses) go up a little. The American public accepts that -- may not like it, but accepts it. This is business as usual. You pay more money for the same amount of product.

In the scenario you have proposed, the ultimate result is the same, but the public's attitude will be a lot different. Your proposal is to pay the same amount of money, but reduce the amount of product. I believe this will be looked upon very negatively by your customers. People seem to view this type of cost increase in a considerably more negative fashion than the one listed above. Once again, the end result (increased cost of a product) is exactly the same, but public acceptance is totally different. In my opinion, the one option is a bit more positive, the second option has a considerably more negative connotation. With the present anti-government, anti-bureaucrat attitude of the Montana taxpayer, I'd suggest that it would be in your best interest (and in the best interest of your customers) to make this change in as positive a manner as possible.

In closing, thank you for the opportunity to comment on this plan. Overall, I think your department does a great job in managing the wildlife resources of this state. Keep up the good work!

Marvin W. Mills

#5

11/13/93 Returned a call to Bob Zimmerman (513 E. Lincoln Blvd., Libby, MT 59923)

I support the plan - this is my personal position and that of the club (Libby Rod and Gun Club). We are supportive of managment of population size and age class as well as optimum hunting opportunity. The spring season is important to people in this area. You will be getting a call from Ray Baemen, the secretary of the Libby Rod and Gun Club concerning the club's position.

#6

NOV 1 3 1993

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
GARNET RESOURCE AREA
3255 FORT MISSOULA ROAD
MISSOULA, MONTANA 59801-7293

IN REPLY REFER TO:
6521

NOV 17 1993

Mr. Don Childress, Administrator
Montana Department Fish, Wildlife and Parks
Wildlife Division
PO Box 200701
Helena MT 59620-0701

Dear Mr. Childrsee:

Thanks for the opportunity to review and comment on your Dreft EIS, Manegemant of Black Beers in Montane. The document is very readable and corrsctly focuses on many of the currant black beer management issues. Good Work!

We endorse your selsction of Alternetive #1 "Proposed Action" over the range of the five elternetives being offered.

The following commants ere directed toward elemants G, H, T, Y and IV. A bettsr informed public on the biology and habitet of the bear (G) is necessary for future effective management. Your retionale edequately expresses populetion and land use decision information needs. Proposed black beer manegement units (H) will dirsct management ections that ere necessery for eite specific problems or opportunities for management. We see the manegement unit idee as an opportunity for the Bureau of Land Management to eesist in implementing the ections proposed in elements T, Y, and IV. These are positive steps for black beer habitat and populetion management.

Sincerely,

Derrell C. Sell
Area Manager

cc:
Bob Haburchak, MSO 931

#7

MONTANA OUTFITTERS & GUIDES ASSOC.

NOV 22 Heidi FYI

33 S. Last Chance Gulch, Suite 2 B • P.O. Box 1248 • Helena, MT 59624 • (406) 449-3578

"Where respect for the resource and a quality experience for the client go hand in hand."

November 19, 1993

Don Childress
Wildlife Division
Montana Dept. of Fish, Wildlife and Parks
1420 East Sixth Avenue
Helena, MT 59620

Dear Don:

Members of the Montana Outfitters and Guides Association are interested in commenting on the draft Environmental Impact Statement regarding the departments's management plan for Montana's black bear population.

Fortunately, our annual convention will be held in Lewistown December 6 - 8, thus providing an opportunity for more members to comment. Unfortunately, we will miss the department's December 7 deadline for receiving comment by one day. Fortunately, the department has traditionally been more committed to substance than form and has demonstrated a willingness to bend deadlines when asked. Glenn Erickson has assurred me that this is so.

Please consider this letter our notice that MOGA will submit comments on the draft EIS following the convention, no later than Dec. 10.

Thank you for your cooperation.

Warm regards,

Jean D. Johnson
Executive Director

#8

CONCERNING DRAFT EIS
BLACK BEAR MANAGEMENT

****

COMMENT FORM

****

NAME: MARK ROGERS

ADDRESS: 225 Edgewood Dr. Kalispell, Mt.

AFFILIATION: tel: - 752-3064

Please provide your comments below. Attach additional sheets to this form if you wish.

I would like to keep hunting as is.
ALTERNATIVE #5

I feel strongly AGAINST alternatives 2, 3, 4

If Alternative #1 is chosen, I would definitely want to leave out elements I, J + U., however I feel that elements H, M, O + Q would have a good effect on the hunting.

My own personal idea is to have an either - or - license - ELK or Bear. You could purchase one or the other per season. Then you could run bear hunting season - MAY 15 - SEPT 15 all then the same.

gen\com.for

thank You

#9

11-20-93

Fish, Wildlife & Parks,

I am a Montana sportsman and I enjoy the spring bear season here in Park Co. (315-317) I have been concern about the management of black bears as well as other Montana wildlife species moving here 5 years.

I have the Draft EIS (management of black bears) After reading the alternatives I am letting you know how I personally feel and think about this draft.

A) Alternative #2 + #4.

I strongly disagree with stopping any spring hunting and/or stopping all bear hunting in Montana. How can any animal population be controlled if Hunting of it was not allowed.

B) Alternative #5

As sportsman and managment it is time to take action

C) Alternative #3

Of the (300) areas we don't have quotas But maybe we should

D) Alternative #1

Except for - A, I, J I agree with the elements of the proposed action

(A, I) The black bear is consider to be a trophy animal not a big game animal (like deer/elk) so the spring the fur and hide of a bear is in excellent shape. Thick, long fur that make it a trophy worth taking.

Either the bears emerge from their den they are not easy to hunt, they are not walking around in the woods half asleep and doing stupid things Myself and other hunters I know agree that hunting spring bears is harder because of the season of food. Then bears are roaming to find food. They are not standing around for hand outs.

In the early fall - till about mid october the black bear still has its summer coat short, thin fur.

At this time of year the bears are more vulnerable than any other time of the year.

All bear, all bears are down lower in the berry patches.

The younger bear, young female bears have been getting hunted since the fall opening date was moved up to the first part of Sept.

I feel that the fall bear season should

1.) Be moved back to coincide with the general big game season opening like it was 4 years ago. or

2) not have a fall bear season.

J.) April 15 - May 31 VS April 15 - June 15

In the (300) areas I hunt it seem to me I see sows with young cubs or individual cubs more toward the end of May, first two week of June than any other time during the season I feel that shorting the season here in the (300) area would be a good idea.

Also around this time of the spring end of May, first of June alot of the bears are rubbing or starting to rub as warmer weather continues.

O. Yes I feel that all black bear licenses should be sold individually, instead of the way they are sold now.

this hunted and killed enough of bears both were taken in the spring, both were furs out, the hides in excellent shape.

I do agree that yes it is time to change and yes upgrade the managment of our black bears needs to be done.

But I strongly feel if you move the fall opening date to coincide with the general big game season you will eliminate the taking of younger bears both male and female.

And by shorting the spring season a couple of weeks will eliminate the orphaning of young cubs Maybe not completely but it's worth a try.

I hope my input has been of some advantage.

Sincerely

Ken Baker

Montana Sportsmen

Ken Baker
3/0 E Callender
Livingston Montana
59047

#10

11-22-93

I should like to comment on Black Bear DEIS -

I have lived in Cabinet Mountains for ½ years and heard there used to be numerous black bear in the vicinity. In our popular hunting area, they are very few remaining. Because of their slow reproductive rate and general visible habits, I believe you should foresee some warning signals that their population may be in jeapardy at this very moment.

Montana should definitely cancel the spring hunt as being absolutely non-sensible and rather cruel - bears are just emerging from dens and vulnerable and cubs are often left to parish when sows mistakenly shot. Of course, grizzlies get it also (15 in 15 years is way too many), but on their own merit, black bears should be more protected.

Please definitely cancel spring season. Like many others, I chose to live and to coexist with wildlife and I think that all of the bear species are too precious and fragile to be threatened by loss of habitat and hunting. Thank you

Debby Barton

DEBORAH E. BOOTS
P.O. BOX 1512
NOXON, MONTANA 59853

#11

FRIENDS OF THE WILD SWAN
P.O. BOX 103
SWAN LAKE, MONTANA 59911

November 22, 1993

Wildlife Dept
MT Department of Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620-0701

Thank you for the opportunity to comment on the Draft EIS for the Management of Black Bears in Montana, these comments are made on behalf of Friends of the Wild Swan, Montana Ecosystems Defense Council and Alliance for the Wild Rockies. We have concerns about several areas of the DEIS which are outlined below

We feel that an alternative that eliminates the hunting of black bears in grizzly bear recovery areas should be developed. MDFWP dismisses the killing of grizzly bears during black bear hunting season as insignificant. The taking of any threatened or endangered species is not an insignificant issue, yet there has not been an incidental take statement issued for this hunt in grizzly bear habitat. MDFWP depends heavily on hunters learning to distinguish between black and grizzly bears but this does not provide adequate protection for the grizzly and assumes that all hunters are responsible hunters, which unfortunately, is not always the case. 11-1

At the very minimum however, we do feel that the spring black bear hunt should be eliminated and support Alternative #2 in that regard for the following reasons:

- There are more grizzly bear mortalities during the spring bear hunt (DEIS pg. 13).
- Eventhough hunters are encouraged to watch bears to see if they have cubs, there still is an incidence of orphaned cubs during the spring hunt. Since it is impossible to distinguish a male from a female bear unless the female has cubs with her it is then impossible for a hunter to know if the female has cubs until it is too late.
- The peak black bear harvest is the last two weeks of May when more females are killed. This is the time when females with cubs emerge from the dens and are more vulnerable to hunting pressure in their search for food sources.
- Based on table 6 page 103 females ranging in age from 3.5 to 8.5 ...rs are taken during the spring hunt. This indicates that a large ...portion of the females being taken are of breeding age which increases ...probability that they had cubs when killed. Males range in age from 2 ...5 years. Younger males are killed more in the fall season (table 7, page ...3).
- According to Idaho's criteria overharvesting occurs when more ...n 40% of the animals taken are females with the desired level less ...n 35% (table 1, page 104). Table 2, page 101 indicates that females ...currently being overharvested statewide. Since more females are ...led in the spring, elimination of the spring hunt could reduce these ...nbers.

Following are concerns about particular Elements in the DEIS.

Element C - We agree with this element but question why ADC is ...olved in this action. If MDFWP assumed the responsibility for resolving ...ck bear depredation problems and ADC was eliminated this would ...eamline the process and provide consistent, cost-effective wildlife ...nagement. 11-2

Element I - Alternative 2 should contain this element. Delaying the ...rt of the fall hunting season would provide further protection for ALL ...rs during the berry season.

Element J - If the spring hunt is not eliminated then the spring ...ason should end by May 15. Females with cubs emerge from the dens ...er than other bears, this would help ensure their protection during this ...tical feeding time after hibernation and also provide further protection ... grizzly bears.

Element R - If this law is to be changed to ensure compliance with ...sance bear policy guidelines for beekeepers, all livestock owners ...uld be included in this change. Livestock owners who attract bears ...ough boneyards or other attractants that could lead to livestock ...redation should also be held accountable for their actions.

Element S - Human negligence is a significant factor in black and ...zzly bear encounters. There are over 215 trouble spots that have been ...have the potential to be attractants to bears in the Northern ...ntinental Divide Ecosystem (research conducted by Brown Bear ...ources). Element S is vague on how it proposes to legislatively deal with this issue. There must be provisions to educate the public but there must also be legislation that provides the "teeth" to go after repeat offenders.

Elements U & V - How is the waste of game statute enforced? We feel that this is a positive statute in theory but it seems that enforcement would be difficult.

Element X - This statute should be rewritten to require that non-lethal strategies were used by livestock owners prior to asking for lethal control. There should also be an inspection of the property to determine if human negligence is the cause for the depredation.

In closing we feel that at a minimum the spring bear hunt should be eliminated but strongly support no hunting of black bears in grizzly bear range.

Sincerely,

Arlene Montgomery

Arlene Montgomery

NOV 2 5 1993

The University of Montana

Wildlife Biology Program
School of Forestry, F310
The University of Montana
Missoula, Montana 59812-1063
(406) 243-5272 (406) 243-4510 FAX

#12

406-243-6364

24 November 1993

Donald Childress, Administrator
Wildlife Division
Montana Department of Fish,
Wildlife, and Parks
1420 East Sixth
Helena, MT 59620

Dear Don:

I finished today reading the Department's Draft EIS on Management of Black Bears in Montana. It has come a long way since the earlier version you had me look at about a year ago. Overall, I think it looks great. I do, however, have a few specific comments and one more substantial comment, which I refer to by page number below.

p. 20: Age structure, by itself, is generally not considered to be a good technique for monitoring populations (see Caughley's book), but is good when used in conjunction with other monitoring techniques that are discussed later in the EIS. It might be better to state here that age structure will be monitored, along with hunter effort, sex ratio, etc., to monitor populations.

p 22. Under RATIONALE for J), second sentence: According to the figures in the Appendix, males are also increasingly vulnerable as the spring progresses. No data are presented to show females emerge later (a reference would be good).

p. 24. top of page: c) Shouldn't all data be analyzed regardless of what is happening in a) and b)?

Why adopt the 6 year median age for females recommendation of Beecham, but not the recommendation of < 35% of the annual harvest being females? 12-1

p. 25. N) Evidence of sex should remain on the hide. It is unclear to me how this will curtail illegal, opportunistic killing followed by after-the-fact purchase of a hunting license. 12-2

O) is a great idea.

p. 27. Q) It is unclear whether the cut-off date for purchasing bear licenses, as discussed in the RATIONALE, will be implemented. Seems to me this would be a good idea, and is 12-3

already being done in many states.

p. 28. R) Great idea.

p. 30. U) Great idea.

p. 33. Wherever the word "target" is used, the word "goal" would be better.

III. These goals should be revised as data dictate.

IV. Habitat will vary considerably by Region and ecosystem. It might be a good idea to review all existing Department data, theses, etc., identify the gaps in knowledge, and then proceed filling those gaps.

p. 38. Bottom figure in Figure 2. On this figure and on quite a few others, especially in the Appendix, trend lines are drawn. Why are data presented from 1971 - 1991, but the trend line is for only 1978 - 1991? With data such as these, the slope of that line is very dependent on your starting year. In this figure, the slope may well be positive if data from 1971 - 1991 were used. If there is a good reason for beginning in 1978, the line should only extend from 1978 through 1991. In Figures 1 and 2 in Appendix 2, the trend does not appear linear, and different time periods are used in these 2 seemingly related figures. 12-4

p. 43. First sentence under Population Dynamics: Shouldn't human-caused mortality be included? 12-5

p. 44., and several other places throughout the document: I would avoid using the phrase "natural mortality rates". As stated elsewhere in your document, humans have been hunting bears for millennia in North America, and there is nothing "unnatural" about people hunting bears.

p. 46. Bottom, and figures on p. 47. What percentage of non-resident combination license fees are used to determine the $1.9 million license sales?

p. 49. Again, the time span used for the trend lines seem arbitrary, and extend beyond the data used.

p. 52. First sentence of 2nd full paragraph: Populations can be expected to remain near current levels. They won't remain stable under any scenario. 12-6

p. 62. "natural" mortality factors again.

p. 68. Under "Impacts on Grizzly Bear Populations" wouldn't Alternative 4 improve the situation for the same reasons Alternative 2 would? 12-7

My more major comment concerns the discussion on page 51 regarding sustained yield of black bear populations. I believe the statement "Therefore, annual hunting harvest is managed at a level corresponding to the number of mortalities that would otherwise occur from other causes" is incorrect in most cases. Animal populations tend to be most productive below ecological carrying capacity (low, nonhuman-caused mortality rates and high reproductive rates). Allowable harvest rates are a combination of annual increment in the population and the degree to which hunting mortality compensates for other mortality. Mortality in black bears caused by hunting is probably partially compensatory, though this will depend on density. At densities below carrying capacity, the population without hunting would have grown by some increment. Hunting takes some, all, or in some cases, more than that increment, and that is affected by the degree to which hunting replaces other mortality at a particular density. 12-8

Populations compensate for hunting mortality if the long-term population trend is stable; this can occur whether mortality caused by hunting is compensatory or additive to other mortality sources (because of what would have been an increase in the population due to births exceeding deaths at densities below carrying capacity).

I believe you and the Department have done an outstanding job putting together this Draft EIS. I hope some of the above comments are useful, and thank you for the opportunity to comment on the document.

Sincerely,

Daniel H. Pletscher
Professor and Director,
Wildlife Biology Program

#13

NOV 2 6 1993

11-24-93

LAMBROS
REAL ESTATE

1001 South Higgins Avenue
Missoula, Montana 59801
phone (406) 543-6663 fax (406) 543-4007
Southgate Mall Branch
phone (406) 721-3360 fax (406) 721-3363

Don Childress
Wildlife Div
PO Box 200701
Helena, MT 59620

Dear Don:

If there is to be a change in bear hunting regulations then I favor Alternative #3.

My reasons for this choice is to obtain more accurate information on our bear population and harvest as well as more protection for females with cubs.

Sooner than we think the anti-hunters will hold us very accountable for our bear hunting as they attempt to shut it down. Also the orphaning of bear cubs is a real celebrity cause to gather the undecided.

Keep up the good work.

Best Regards
Rick Lambros

630 Big Flat Rd
Missoula, MT 59801

#14

NOV 28

November 23, 1993

Wildlife Division
FWP
Box 200701
Helena, MT 59620-0701

Dear Concerned,

I am writing to express my support of the proposed black bear management plan. My personal background is in Forest and Wildlife Management. I most recently served as Rehabilitation Director for the Alaska Raptor Rehabilitation Center until my family's move to Montana just over a year ago.

The proposal appears to be a reasonable solution to several current concerns.

Sincerely,

Lynn Vaught

Lynn Vaught
PO Box 1658
Whitefish, Montana 59937

#15

NOV

OUTDOOR EXPEDITIONS AND BOOKS

Duncan Gilchrist
405 Dutch Hill Road
Hamilton, Montana 59840
(406) 961-4314

November 24, 1993

Draft EIS Management of Black Bears in Montane
Wildlife Division
Montana Department of Fish Wildlife and Parks
PO Box 200701
Helena, Montana 59620-0701

I would like to comment on the above EIS. I generally concur with Alternative number 1 accept items T, U and W.

T- I cannot accept a September 15 opening as the early September hunt in the berries can be the most aestheticelly enjoyable bear hunt that we now enjoy along with being the one time when bear meat can be excellent to eat. In the better years the serious bear hunter does have a reasonable chance of seeing bears in the beautiful high berry patches. This is habitet that can make the hunter glad to be alive and in the hills. A bear shot in the berries can taste the best that it likely ever will. Myself this is the only time that I will salvage black bear meat.

U- Salvage of bear meat is kind of ridiculous isn't it? Over a lifetime of bear hunting, guiding and being with others in the taking of a documanted 180 plus black, Alaska brown, grizzly and polar bears I think that I can say that few individuals from the human race will eat bear meat unless a gun is held to their head. Bruins seem to take on the flavor of whatever they have been feeding on. Boy! who can even stand to be next to a dead carrion eating bear? What a law that would bal Salvage bear meat, be it can be put in tha garbage can once the hunter has returned home. Now a bear that has been feeding on berries is a different matter, but you are proposing doing away with bunting during the ona period when bears are fit to eat. Not logical.

W- Wow you are really stepping into the fire by outlawing scents. I assume you are including cover scents that are commonly used for deer and alk hunting. Will F&G look smart when ecma warden arrest a buntar for putting ivory soap on bis skin. Is the intent to outlaw tbe usa of scents in making mock scrapes in daer hunting? I think tbat system is universally accepted tbrougbout the US. Lets get real. I believa tha laws concerning bear baiting should remain exactly as they ara now. 15-1

Long Live Bear Hunting

Duncan Gilcbrist

Publisher, hunting books — producer, outdoor videos — Senior Field Editor, Eastman's *Outdoorsmen* — New Zealand hunting trips

#16

Comment for BB DEIS:

- Seasons are too long — shorten the seasons
- People should not hunt bear unless they use the meat

Susan Ennenbach
Box 1227, Eureka, MT 59917

(Comment taken by John Fraley)

#17

Glenn Erickson
Wildlife Division
Helena

NOV 30

Attn: Black Bear EIS

Ben Ryan
Box 852
W. Glacier

Proposal 1 or 2 would be OK
- would not personally eat the meat but would be willing to bring it in to be given away.
- proposal 2 had separate bear areas — preferred this to proposal 1.

#18

NOV 30

Dear Fish, Wildlife, and Parks,

I'm writing to you in regards to your proposed changes in black bear management. I am an employee of the U.S. Forest Service and an avid hunter, and have spent over 10 years in the woods of northwest Montana. Here's what I think about bear hunting in Montana:

#1) Spring bear season should be completely eliminated. No animal should be hunted at this time of year. Cubs may be stashed by the female while she forages, and even a careful hunter could mistakenly shoot her.

#2) The season is entirely too long. How many states can you think of that have a four month season? Not only can too many black bears be taken, but with a season this long, the potential for a grizzly to be taken by accident is huge. It would be very proactive of your agency to take this into account when deciding on new black bear regulations because environmental groups will eventually sue you over this issue.

As an employee of the Forest Service, I see us jump through hoops to protect the grizzly — and I whole-heartedly support that. The things we've done seem to be helping. But all it takes is one uninformed bear hunter to undo a lot of effort on our part. How many 12-year olds can really tell the difference in species? A shortened season would reduce this risk.

#3) I have discussed bear hunting in Montana with many people who have lived and hunted here much longer than I have. Some of these people have been in the area for 40 years. All these people have mentioned a decline in the number of bears in northwest Montana. I attribute this to too many tags and too long a season. Of course these observations have no statistical basis, but I believe you have studies to back them up.

#4) It may be possible that a disproportionate number of out of state hunters come to northwest Montana. Out of state hunters should be surveyed as to what area they intend to hunt, and permits adjusted as necessary. This could be better accomplished by using a lottery by bear management district.

In conclusion, I think spring bear season should be eliminated, the fall season shortened, and perhaps fewer tags given out over-all. Thank you for the opportunity to comment on this important issue. Hope you can read my writing.

Sincerely,

Leslie Ferguson
Libby, Montana
11/26/93
26 Milton Dr.

#19

NOV 30

T.L.Brownlee
2020 Townsend Ave.
Helena, Mt. 59601

11-27-93

Dear Sirs;

I couldn't help noticing a story on the cover of today's Independent Record concerning proposed changes in the bear hunting lave. It mentions that comments should be directed to you, so here they come...

First off I request a copy of the EIS. Does it shov, definitively and statistically that we have lover bear populations, neccessitating shorter spring and fall seasons? Doee it show an inordinately high kill ratio of sovs to boars? I am moet interested in finding out. I would bs most displeassd to even think the State of Montana was buckling under to anti-hun ting preseurs concerning black bears, as have the states of Colorado, and California, and as has Montana already done concerning Bison and Grizzly.

The other thing I am most interested in learning is about sov bears denning in early Sept., ae etated in the IR. Thie has not been my experience or observation, indeed all black beare are out in force at thie time to stock up on berries. Thie statement about sarly dsnning really smacke of "outeide preseure".

In ehort, my commente are, Do you <u>really</u> have the facte, or are we having the media dietort them to the "fencs sitters" on the issue, so that you can diecreetly pueh the anti-hunting buttom well bsfore the panic light gose on...

#21

Nov 28

Dept. of Fish, Wildlife & Parks

Dear Sir

I would like to express my comments on the Draft EIS black bear management proposals.

I generally support the Department and its preferred action - Alternative #1.

When only 109 bears are harvested for 994 archers out of 1,153 bears total for 12,248 total hunters (year 1991 figures) there seems room for consideration of an archery only season in September. This would result in more harvest, more opportunity for archers and with the loss of the sportsmen licenses, a non dedicated hunter as he would still have to possess the black bear licenses as well as archery licenses. I believe the short range of the bow more than offsets the vulnerability issue and would take issue with the statement on page 22 that this would not have a disproportionate impact on archers. I feel a properly licensed bowhunter should be allowed to hunt black bear in the general bowhunting season time frame.

Sincerely
Charles D Allen
Box 674
Chester, Mt 59522

#22

[redacted] 20 [redacted]

November 22, 1993
34 Brooksida
Missoula, Montana
59802

Mr. Don Childress, Administrator
Wildlife Division-Black Bear Managament Plan
Montana Dept of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701

Dear Mr. Childress:

Thank you for the opportunity to comment on the draft EIS on managament of the black bear population in Montana.

It does not appear that "anything is broke." I strongly support Alternative #1, the Proposed Action.

Very truly yours,

Doug McClelland

#23

WILDLIFE DIVISION
MONTANA DEPT. OF FWP
P.O.BOX 200701
HELENA MT 59620 - 0701

TO THE PERSON WHO HAS THE
FINAL SAY IN SPRINGTIME
BEAR-HUNTING:

SPRINGTIME BEARHUNTING
IS OUTRIGHT IDIOTIC
BECAUSE THE FEMALES COME OUT
OF THEIR DEN WITH CUBS
AND GET SLAUGHTERED;
DEPENDENT YOUNG HAVE TO
STARVE TO DEATH OR GET KILLED
TOO. -
S T O P DESTROYING BEAR HABITATS
BY "DEVELOPMENT" AND HUMAN
"ACTIVITIES" - TOO MUCH DA-
MAGE TO BEAR HABITATS IS ALREADY
DONE !

JOHN P. O`HARA

Court orders more bear protection

SAN FRANCISCO (AP) — A federal appeals court has ordered the government to restudy its logging plan for the Flathead National Forest in northwestern Montana and consider increased protection of grizzly bears.

The U.S. Forest Service's 1988 land and resource management plan for the forest projected a maximum level of annual logging that could harm the grizzly population, according to the Forest Service's own studies, said the 9th U.S. Circuit Court of Appeals.

The court also said the U.S. Fish and Wildlife Service, which found that the plan posed no danger to the grizzlies, did not use guidelines the government considers necessary to prevent extinction of the species. The Forest Service consulted with the Fish and Wildlife Service before approving the plan.

The court gave the agencies six months to reanalyze the effects of the plan on grizzlies and other threatened or endangered species in the forest, such as gray wolves and bald eagles.

A decision on whether to prohibit road work and clear-cutting of timber in the meantime is up to U.S. District Judge Charles Lovell, the court said.

Lovell, who conducts court in Helena and Missoula, had dismissed the 1989 lawsuit by environmental groups led by Resources Limited, saying they failed to show that they would be affected by the forestwide plan as opposed to individual timber sales. The appeals court reinstated the suit, saying groups whose members visit and use the forest can challenge an overall management plan.

In another part of the ruling, the court upheld the Forest Service's environmental impact statement, a separate document that analyzed the effects of various logging and road-building alternatives on water quality and species habitat.

"We were able to show that ... the Forest Service misled the Fish and Wildlife Service by not giving them all the information about the plan's potential impact on grizzly bears," said Daniel Rohlf, a lawyer for the environmental groups. "Now we'll get a closer look at Flathead's projected timber harvesting levels and their impact on bears and wolves."

#24

12 Old Bull River Road
Noxon, Montana 59853
November 28, 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701

Dear Wildlife Division,

After reading the draft EIS on Black Bear Management in Montana, I am encouraged by the efforts of FWP to update and refine Montana's black bear management program.

I would favor adoption of Alternative 2 (Termination of Spring Hunting) first, followed by my second choice of Alternative #1 (Proposed Action). Throw out Alternative #4 (No Hunting) and Alternative #5 (No Action)!!

The following points are some concerns and thoughts I have regarding some of the elements of Alternatives 1-3:

Element F should require all bee keepers to take preventative measures. With FWP providing fencing materials, this should be mandatory;

Public education programs (Element G) should also include encouragement and the means to report hunting violations and illegal activities involving black market trade in bear body parts;

Pursuit of bears with dogs was prohibited in 1921 and is seen as unethical exploitation of wildlife. Why is pursuit of mountain lions with dogs acceptable? Chasing ANY wild animals with dogs is disrespectful of wildlife. WHY are mountain lions chased in the spring when some females have kittens? If this unethical "sport" is acceptable, at least end the overlap of spring mountain lion chase with spring bear hunting (Element J) no matter which alternative is adopted;

To ensure hunters' legal responsibility include provisions for testing hunter knowledge of bear biology at the time of licensing. Offer FWP sponsored short-courses to youth and adult bear hunters, train outfitters. Produce an informational booklet with the test that must be completed with every license application (Elements L & O);

Pursue legislation (Element S) to require that establishments handling food take preventative measures to minimize bear depredation and human/bear conflicts. Develop a program (Element II) to offer FWP bear-proof garbage containers to restaurants, inns, resorts, stores, located in bear habitat similar to the bee keepers program. 24-1

Thank you for your consideration of my comments.

Sincerely,
Susan Hilstrom

#25

Dear Sirs,

I am in favor of limiting the Black Bear hunting season. And possibly eliminating it all together. For the reasons that it is disgusting that Black Bear hunters are allowed to let the bear meat rot and that the Black bear population is dwindling. I used to see Black Bears on my way to school and when I would drive along the highway, but I don't see them any more.

I think it would be great if they shortened Black Bear hunting season in the fall by two weeks and eliminated the Black Bear hunting season in the spring so that young Black Bears would be able to a mother and not be abandoned.

Thank you for your time.

Sincerly Hannah Hernandez
4 Corners South
Heron, Mt 59844

#26

Cesar Hernandez
P.O.B. 37
Heron, Mt. 59844
11 / 28 / 93

Montana Dept.of
Fish, Wildlife and Parks
1420 East 6th Ave.
Helena, Mt. 59601

Dear People,

Greetings! Here's taking the opportunity to pass along my two cents as well as comment on proposed changes in the Black Bear hunting season.

First off I'm a hunter and have been for the 20 years I've lived in Montana. I only hunt what I eat so that relegates me to deer and elk. Some animals such as bear, mountain lion, sheep and goats I would much rather just admire as wildlife and therefore do not hunt.

Secondly, I'm a woodsworker (faller and log cabin builder) , and I can say that in the last twenty years I've seen a decline in the number of black bears in general, and large black bears period. This last hunting season I came upon what I can only assume was a motherless cub and what I deemed the lonliest bear cub in the world. About nine years ago a hunting partner and I came upon a pair of motherless cubs. I and my family enjoy bears and they have never given my family problems, except for foraging amongst the apple trees. I know several of the local outfitters and it seems that the majority of bears that end up biting the bullet are itty bitty things the size of a throw rug. I would be in favor of seeing the spring bear hunt eliminated in its entirety. Barring that choice I would definitely like to see a shortening of the bear season. I feel we are losing too many bears when sows get shot and their offspring starve to death. I also agree with the wasting meat provision ; if you don't eat it you should'nt shoot it.

The following is a personal observation. In each of the last three general hunting seasons I have found a dead and apparently lost elk. This year it was a cow elk with what appeared to be a lung shot that ended up in a front leg. Last year it was a spike bull that fell in archery season. The year before that it was a calf elk, which I was able to salvage the meat from. I've lost one elk in twenty years of hunting in spite of my best efforts at tracking the animal, so I know what it's like. All told I've found five lost elk in twenty years, but one each in the last three consecutive hunting seasons is a bit much. Just thought you might want to know whats going on in the woods of district 121 when you plug the numbers in.

This last item is just an idea. My family values the meat that I can harvest during the hunting season. It's a real bitch come hunting season to find about a dozen out of area hunters in your favorite spot. It would be worth it to me to pay double what I currently pay for deer and elk license to be able to hunt before or after the general hunting season. I think you should consider such a license for local hunters residing in a district and maybe the raise in revenues that could result.

Sincerely.
Cesar Hernandez

#27

To Fish, Wildlife and Parks officials:
Comment on black bear hunting:

Please stop spring black bear hunting. Alot more mother bears are killed than you ever find out. Some ethical hunters report it when a female with cubs is killed, but alot more do not report it. Why have a spring hunt? A hunter can not tell a male from a female. The cubs are not always with their mother, and alot of hunters simply don't care! Please stop the spring bear hunt. It is cruel and unethical.

Sincerely,
Sandi Evarts (892 4137)
375 Kokanee Bend
Col Falls, Montana
59912

#28

[illegible], MT, [illegible]
Nov. 22, 1993

Wildlife Division
MT. Dept. of Fish, Wildlife, & Parks
Box 200701
Helena, MT, 59620-0701

Gentlemen:

I understand that you are accepting comments for an environmental impact statement on black bear management in Montana.

There are three main points which need to be emphasized:

① It is important to continue hunting of black bear in Montana. Hunting is a proper bear management tool, and human activity is a proper part of any complete ecosystem.

② Therefore — the no-hunting alternative is not an acceptable alternative.

③ It is also important that we (Montana) continue to conduct spring hunts for black bear. These hunts help to reduce bear-human conflicts, especially during the busy summer months.

Thank you for the opportunity to comment. If it is possible, please send me a copy of either the draft EIS, or a copy of the final draft.

Sincerely yours,

Stephen V. Majerczak

#29

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Floyd J. Templeton

Box 6

Lincoln, Mt.

59639

#30

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Darlene Templeton

P.O. Box 6

Lincoln, Mt 59639

#31

Postmarked 12/1/93

Mike Quesenberry
Box 942
Livingston, MT 59047

From what read for shortening the season - understend it would be shortened by two weeks in the springs and start two weeks later in the fall. Adamantly opposed to having to bring out the meat - hunted for saveral years and taken many bears - total foot hunter - this would be a hardship on the foot hunters because the weather in the spring is warm - person would be in jeopardy of losing meat if he had to bring it out. Could possibly be ticketed for letting the meat spoil. Does not think that is a fair decision.

#32

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dear Sirs,

After reading your EIS for the Management of Black Bears in MT, I would like to make the following observations.

First of all I feel that there is a general lack of very substantial scientific documentation and data within the state to base any decisions upon. Referencing what has taken place in Idaho, California and Alaska regards bear management makes me wonder how much of the various proposals are based on facts. Nevetheless...

With regards L) " Actively promote good hunter ethics" etc. my experience has been that hunters will be put in a situation that forces them to make mistakes. On those game ranges where hunters are allowed to take only bull elk with one branch or more and also at least 14inches high (or whatever the regulation really is) then some hunters tend to shoot first and check later. If there is no branch and the antler is only 12 inches high, then they just leave the dead elk where it lays and neither the hunter nor the elk benefit. Forcing the hunters to become biologists is more than one can reasonably expect. And forcing them to make what will probably turn out to be a quick decision based on information taken through a spotting scope at 1000yds.is to insure that they'll shoot first and check later; the result will be more dead and wasted game. Sound shots and brush shots and the hunters that use those methods are not compatible with gender identification and whether or not the sow has cubs. This is beyond many hunters' talents. Many couldn't tell the difference between a moose and a mule, let alone a sow and a boar bear. No, I'm not down on hunters, but I have experienced the above mentioned concerns and whereas I'm sure you mean well, the result might backfire.
Regards [illegible] all black bear licenses"etc. I agree with this [illegible] only if the total sum of the new black bear licenses in the Sportsman's license package remains the same. The [illegible] hope that this separation into distinct licensee is not an attempt merely to raise more funds for the FWP.
Regards Q)"Institute an improved documentation" etc. Once again I agree only if this idea isn't pushed to the point where Sting Operations are pursued. There are enough laws being broken without trying to seduce people into crime. And if FWP wardens need Sting Operations to keep them busy then maybe it is time to reduce staff numbers and decrease hunting fees.
Regards S) "Institute a public information program"etc. I feel there is possibility here for abuse. Certainly humans should be responsible for their actions in human/bear conflicts. But making land use changes a mandatory item is a further step in the wrong direction. By forcing unreasonable laws on the agricultural community as the perennial bad guy, a further encroachment of people into bear habitat has been insured. Sure some places would have gone belly up anyway, but in days past, a neighbour could have purchased the property. Now, in order to gain any profit, the bankrupt landowner demands and sometimes receives ever higher prices just to pay off the IRS and still get a nickel for himself. Making ranchettes out of the place and consequently bringing in more humans is the result, and this equals further habitat destruction.
Regards W) please see Q) above.

Regards Z)"Produce an annual, standardized"etc. I am concerned that this item isn't currently being carried out for all wildlife populations under the aegis of the FWP. If there is no data base then how are decisions being made and based upon What for facts?

Overall, I would like to see the bear hunting districts broke down into habitat areas rather than coupled with the existing deer or elk districts. I applaud this concept. Also of the various alternatives I believe that #3 is the best. I agree with the female bear Spring quota system and the need for handling problem bears.

Thank you for sending the EIS plan.

Sincerely,
John M. Monahan
John M. Monahan
P.O. Box 418
Jordan, MT 59337

#33

Helena, Mnt.
Dec. 1, 1993.

Montana Fish, Wildlife & Parks
P.O. Box 200701
Helena, Mont.

Dear Sirs.

Regarding the black bear hunting issue — I am 100% opposed to spring bear hunting in the state of Montana. The few dollars it generates in fees is offset by a very inhumane act when cub bears are left to survive without the females guidance. Please, this is one segment of our fish and game laws where a huge improvement in our management of wildlife in the Big Sky Country can be made.

Thank you Kindly,

Harold Langenbach
630 N. Hoback
Helena, Mont. 59601

P.S. - Please send me a copy of the EIS

#34

Mike Hillygus
719 Taylor Street
Missoula, MT 59802

Hard to defend the fact that for years and years you can hunt and not have to take the carcass - antis will get you sooner or later.

Baiting and chasing with dogs - very against, but knows one of the biggest bear biologists in the nation, Lynn Rogers from Minnesota is an advocate of this because you can better judge the bear you can shoot. Probably chase with dogs is better than baiting.

#35

DEC 0 : 1993

I have received a copy of the black bear Draft EIS. I believe a thourough job of evaluating the black bear status in the document has been accomplished, however I have some additional comment I hope you find useful.

As a hunter and I am primarily interested in the opportunities for the hunter but recognize also the importance of maintaining a healthy bear population.

Some additions or revisions to the proposed action that I would like to see included are:

- Spring hunts for black bear would be by drawing only - (resulting in less black bears killed during the crucial spring season. Maintaining a spring season and reducing liklihood that females w/cubs will be killed.

and/or

- Spring bear and fall bear licence separate - (like turkey) (must purchase license for one or the other but not both seasons - less hunters out hunting bear at one particular time)
- Non-Residents can only hunt bears by Drawing and must be guided.

- I am strongly opposed to landowners (livestock and bekeepers) using dogs to catch and kill depredating black bears. Loss of stock is a cost of doing business - if they don't want to lose stock they must take precautions to prevent depredation (ie elevated bee hives, electrified fencing) - in the case of sheep sheepdogs (ie Great pyrenees, german shepards, etc can be effective.) but used to protect stock, not to chase & kill bears

- All bear licenses must be purchased at Regional offices where a hunter education video is required viewing for the purchase of license.

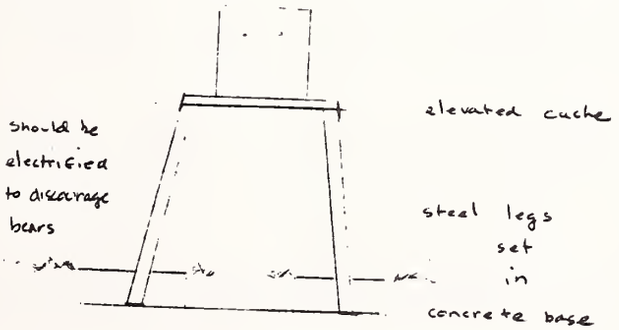
- Bear license must be purchased before the first day of bear season to reduce liklihood that a bear is shot by someone who intends to get the license at a later date.

- It appears that beehive depredation is a major cause of non-hunter caused mortality, but it also appears to me that this is one of the easiest of depredation problems to solve. If bee keepers were required to protect the hives from bears most of not all of these situations could be avoided
  1) Only F&P or ADC can kill bears not beekeepers They must call appropriate agency.
  2) Draft EIS states that electrified fencing is effective In Alaska people have used elevated cache for years to protect food and gear from bears - why not build a cache to protect the hives? (see drawing)

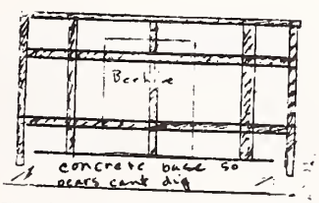
- Use of motion sensing photography to catch bears in the act and prevent killing of "innocent" bear.

- Rubber shotgun slugs or pellets to help in aversion training as an alternative to killing or transplanting

1.)

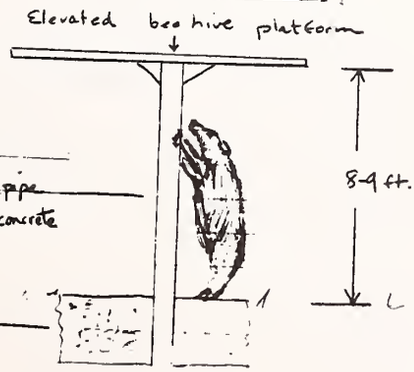


2.)



welded steel cage 2x2 channel - electrified to discourage bears

3.) Solar electric charger can be used to discourage bears.



Thank you for including me in this process - Lets manage for bigger bears and kill fewer of them - Let the little guys grow up and protect the females w/cubs. Bear hunting is big business and most everyone who cares at all about bears would like to see more big bears.

I have moved from 910 Roosevelt Blvd. A and 3491 14th Ave so. GT Falls

to 1205 7th Ave So. GT Falls. 59405

please address any further correspondence to this address

Sincerely

James J. Bennett

#36

DEC 03 1993

November 30, 1993

To whom it may concern,

We are writing to you regarding black bears. We have always believed that if you kill something you use it. We can not believe that to this day black bears can be hunted just for trophies; heads and furs. Please make it mandatory for the meat to be used when a black bear or for that matter any creature that is hunted not to be wasted. As far as shortening the season that would be fine with us as well.

Thank you for your time and consideration.

Sincerely,

Mike and Jackie Beye
PO Box 906, Eureka, MT 59917

#37

SUMMARY

This draft Environmental Impact Statement (DEIS) describes five approaches to managing Montana's black bear populations; the process used to formulate the five alternative actions; and the expected environmental consequences of implementing each. The potential effects of each action on black bear populations, recreational opportunity, regulation of harvest, assessment and monitoring of black bear population trend, illegal exploitation, economy of local communities, program funding and the incidence of human/black bear conflicts, are described. Four of the five alternatives include hunter harvest as a management tool. One alternative does not incorporate hunter harvest. All issues and concerns voiced by the public were considered and are addressed in the draft EIS.

Your Opportunity for Input:

FWP welcomes your thoughts on this DEIS. You may provide your thoughts in writing (address below) or during one of three public hearings (listed below). In order for your input to be considered in development of the final EIS, we must receive it by December 7, 1993. Copies of the DEIS have been mailed to potentially affected organizations and individuals, many of whom participated in the public scoping during July and August, 1993. Copies of this DEIS are also available by request.

Public Hearings on the Black Bear EIS will be held at the following locations:

KALISPELL:	Wednesday, November 17, 7:00 - 9:30 p.m., Winchester Room, Outlaw Inn.
HELENA:	Friday, November 19, 7:00 p.m., Helena Fish, Wildlife and Parks Headquarters at 1420 E. 6th Avenue.
BILLINGS:	Tuesday, November 23, 7:00 p.m., Gallatin Room, Holiday Inn, 5500 Midland Road.

Written Comment should be sent to:

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

This DEIS is available by mail by calling the Helena FWP office at 406-444-2612 or Telephone Device for Deaf at 406-444-1200.

Not being an expert on bear management in Montana I do feel that Spring hunting should not be common practice tho. this does not involve bear - I know

Don

#38

DEC 0 3 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Don Page
no address
Lincoln postmark

DEC 0 3 1993

#39

DEC 0 3 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Ronald Roberson
no address
Lincoln postmark

#40

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Emma Roberson
no address
Lincoln postmark

#41

DEC 03 1993

Dec. 2-1993

Dept. of Fish Wildlife & Parks
Wildlife Div.
P.O. Box 200701
Helena, MT 59620-0701

Dear Sir:

I would like to comment on your proposed black bear management plan as published in the Missoulian, Thur,, Dec. 2-1993.

As I have not read the EIS I can only comment on the article in the paper. Please send me a copy of the EIS.

I am opposed to the requirement that hunters use the meat from black bear that have been harvested. I have first hand observed black bear meat that has been so ladden with the parasite trichinosis that it is not fit for human consumption. I am aware that cooking the meat at a certain temerature for a period of time will kill the parasite, however I opt not to chance it.

I am opposed to the requirement to have bear heads and hides inspected by the FWP Dept. within five days of the kill or any time frame for that manner. It would be an inconveience for the hunter and further take the time of the FWP's officer that should be in the feild during critical hunting times enforcing the laws as mandated by the people of this state.

If you in fact eliminate the black bear license from the sportsman's license which I would not be opposed to, I feel you would have to offer something else to make the sportsman license attractive to the hunter, perhaps an extra deer tag or something along that line. I would not, as I have in the last many years purchase a sportsman license if you were to eliminate the bear tag. I do not with the intent in mind hunt black bear and have no real desire to do so, however if I am in the feild and happen across a trophy I will most certainly harvest him.

I am not as concered about the open or close date of the season, I am more concered about the use of dogs. I am totally and competley apposed to the use of dogs and bait for hunting black bear. This is, in my opinion not being a sportsman at all. I hope these comments wil help you in your decision.

Thank-you

Ben Simonson
2019 Hwy.# 200
Noxon, MT 59853

Ben Simonson

#42

DEC 0 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Dr H Mercer
no address
Lincoln postmark

#43

DEC 03 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Scott Thielmann
no address
Lincoln postmark

#44

December 2,1993
1197 Montford Rd.
Kalispell, Montana
59901

DEC 03 1993

Wildlife Division
Montana Dept. of Fish, Wildlife and Parks
P.O Box 200701
Helena, Montana
59620-0701

After reviewing the draft EIS on Spring Black Bear Hunts, I have some comments I would like to submit to your staff for consideration. The SOLE purpose of the Spring Bear Hunt, or any bear hunt is for the benfit of the hunter. The hunter takes pleasure in the stalking and killing of the bear, and the ultimate display of the hide, the head, and the exagerated stories he is able to relay to those who find this adventure interesting, exciting and a challange. The truth is this is a needless killing. The bear's right to life is taken for the joy of the hunter. It is a selfish and needless killing. The slaughterer does not EVER consider the value of the bear, as a species, as a living creature, as an animal we need to share this world with. When will we ever learn we are not the dominant species, and that domination is not condusive with nature and her gifts?.

In the spring, the bears are just arrousing from a winter's hibernation. The bears are hungry, weakened by the months of no food, the mother bears often leave the den in hopes of food, and would return to their cubs,who still need their mother's care for their own survival. The hunter comes along, claiming this is a sport, he is entitled to because he is from Montana, and it has always been done this way, and he begins his hunt. Often the mother's are killed, leaving the cubs to die, often grizzlies are mistaken for black bears, and shot, and an always the bear population is altered by the greed and dominant mentality of Montana hunters. Enough! The message is loud and clear, all of us are on this planet, including the animals. We are witness daily to the destruction of the earth by the forces of man, and yet we continue. Man needs to learn to co-exist with the animals of the world, as well as with other peoples of the world. No one has the right to dominion over another, or over the animals for the shear joy of the kill.

Montana needs to realize her potential as a state. A state that still holds some of the wonders of nature. We do not have to follow an archiac right of hunting, just because it has been done in the past. We can begin to set the pace as a state that is truly interested in preserving the land, the wildlife, the rivers, the air, and prove that humans quality of life is not improved by the needless killing of bears.

Thank you for your time, and considering my point of view.

Respectfully,

Hope C. Noyes

#45

DEC 03

Dear Sir -

I do think the black bear season should be shortened. They should not be hunted at all in the spring because of baiting. I agree with not wasting the meat.

Patricia Scown

PAT SCOWN
1815 MONROE AVE
BUTTE MT 59701-5641

State of Montana
Fish, Wildlife & Parks
1420 E. 6th
Helena, MT
59601

NORTH AMERICA — PREDATORS IN INTACT ECOSYSTEMS

DEC 03

Predator Project PO8 6733 Bozeman, MT 59771 406-587-3389 (Phone/Fax)

Dedicated to Protecting Imperiled and Other Predatory Species and Their Habitats Across North America

#46

Montana Department of Fish, Wildlife and Parks
Wildlife Division
POB 200701
Helena, MT 59620-0701

December 2, 1993

To Whom It May Concern,

Predator Project appreciates the opportunity to comment on the DEIS for Black Bear management in Montana. As an overview, we'll start out by stating that although Predator Project is not opposed to hunting, we are opposed to the hunting of black bears. Being realists, however, we acknowledge that an end to the hunting of black bears in Montana is not likely to come about soon. Therefore, our comments on this Draft Environmental Statement on Black Bear Hunting in Montana (DEIS) reflect our attitude that if allowed at all, black bear hunting in Montana should be managed for the protection of both black and grizzly bears **first**, and for the opportunity of human hunters **second**.

Baiting, hounding, and the spring hunting of black bears all have a significant negative impact on *ursus americanus*. We commend the Department for continuing the prohibition on bear baiting and hunting bears with hounds. Unfortunately, the DEIS proposed action would maintain a spring hunt.

Only six states out of the 28 states that permit black bear hunting have a spring hunting season — AK, AZ, ID, OR, MT, and WY. Arizona's spring season is so limited that last year only one hunter shot a black bear in the spring. So, for all practical purposes, only five states have spring seasons. In this respect, Montana should join the rest of mainstream black bear management, and ban the spring hunt.

Although the DEIS proposes many actions which will be beneficial to bears and which requires greater responsibility on the part of humans, it falls short on three counts: 1) the proposed action maintains a spring bear hunting season; 2) the DEIS does not include an alternative prohibiting the hunting of black bears in grizzly bear habitat; and 3) Alternative #2, which proposes abolishing the spring season, was developed without some of the protections included in the preferred alternative, rendering it less attractive by virtue of excluding important elements. The following comments are presented by element, with our discussion following each one.

Discussion of Elements Not Included in the DEIS

Predator Project does not agree with the Department's decision to not include an element prohibiting the hunting of black bears in occupied grizzly bear habitat. The reasons for not considering this alternative, which included "a feature article in Montana Outdoors on black bear/grizzly bear identification (Kasworm 1987)," as well as references to the hunter education materials and programs available to both the general and hunting public, do not provide strong enough safeguards to prevent mistaken identity kills of grizzlies.

Evidence in support of our argument that hunter misidentification in the field remains a real and potentially damaging problem is the recent shooting of "Trouble," the grizzly bear that escaped from a sanctuary compound, roamed wild for a period of time, and then was shot and killed by a professional bear tracker, who claimed not to know she was a grizzly. Additionally, we feel that to conclude that recorded grizzly mortalities as a result of misidentification of species are not biologically significant (15 in Montana between 1975 — 1991, and 10 in Wyoming from 1972 — 1985) is irresponsible. For instance, far fewer grizzlies were lost due to management kills in the Lake/Bridge Bay area of Yellowstone National Park (6 bears over 10 years), and yet the NPS recently agreed the number was biologically significant enough that they moved to obtain an incedental take permit from the USFWS in response to a SCLDF lawsuit brought on behalf of Predator Project and several other groups.

Given all the pressures grizzly bears face in the ecosystems where they still survive, Predator Project feels that accidental hunting mortalities should be reduced as much as possible, and that *all* grizzly bear mortalities are significant. One of the alternatives in the final EIS should include an element prohibiting the hunting of black bears in occupied grizzly bear habitat.

Discussion of Elements

Element A: Continuation of the existing spring and fall black bear hunting season format.

As stated in our opening paragraph, Predator Project is opposed to the hunting of black bears for several reasons: 1) black bears, as predators at the top of the food chain, are under tremendous habitat pressures from poaching and human encroachment, and should not be subjected to hunting as well; 2) scientists do not yet know enough about the population dynamics of black bears in Montana, or about the effects of black bear hunting on grizzlies; 3) hunting black bears leads to the accidental killing of grizzlies; 4) Unlike some game species, no scientific evidence exists to support any claim that black bear hunting is biologically necessary.

If a black bear hunting season continues in Montana, Predator Project is especially opposed to the continuation of a spring hunt. Spring hunting of black bears puts cubs at risk of death when their mothers are killed by hunters. Bears are at their most biologically vulnerable in the spring, weakened by their winter fast and by the arduous search for specific spring forbs which "jumpstart" their digestive tracts. Black bears often travel long distances after emerging from their dens in the spring, putting them at greater risk of encountering humans. According to recent public opinion polls taken in Oregon and Colorado, the majority of people in those states felt that spring hunting was unethical (78

the state.

The DEIS should consider the effects of spring hunting on grizzly bears. In ecosystems where grizzlies share the forest with black bears, *ursus arctos horribilis* can also be negatively affected by spring black bear hunts. The grizzlies' search for spring forbs takes them to the same lower elevation habitat as black bears, where they may not only encounter hunters who mistakenly identify them as black bears and kill them, but other humans or human attractants which can lead to human habituation, livestock depredations, and eventual death by management removal. Thorough research to determine the effects of black bear hunting on grizzly bears has not been done. Given that the highest numbers of black bears taken during the season occurs during the spring, the spring hunt should be cancelled in order to prevent a similarly high rate of mistaken identity kills of grizzly bears.

46-1

Element B: Continued use of harvest quotas, including female subquotas in some black bear management units.

If black bear hunting continues in Montana, Predator Project supports the use of quotas. The EIS should include a description of the characteristics of quotas for the different management units.

Element C: Continues to consider black bear mortalities resulting from Animal Damage Control actions in the formulation of hunting season quotas.

Insofar as this element allows for MDFWP to continue to include bears killed by ADC as part of the quotas for total numbers of bears allowed to be killed, thereby addressing the cumulative impacts of all types of bear mortalities when setting quotas for hunter kills, Predator Project supports this element. However, we'd like to take this opportunity to ask the Department: why involve ADC at all? MDFWP could assume all responsibility for black bear depredation resolution and eliminate ADC involvement, resulting in more streamlined, consistent, cost-effective wildlife management, as well as more humane, biologically-sound bear management. The final EIS should include an element and alternative which considers eliminating ADC from the black bear management program, as well as a cost-effectiveness comparison between taxpayer dollars spent by ADC to remove "nuisance" bears and that which MDFWP would need to spend. Such a comparison should also take into account the administrative costs incurred by MDFWP in overseeing ADC actions.

46-2

Element D: Continue the existing requirement that all black bear skulls be presented to a FWP representative so that a tooth can be extracted and subjected to laboratory analysis for age determination.

If black bear hunting continues in Montana, Predator Project supports this element.

Element E: Continue the prohibition of baits or hounds (including chase-only seasons) to pursue or harvest black bears.

Predator Project commends the Department for continuing these prohibitions.

Element F: Encourage beekeepers in areas of chronic black bear depredation to use preventative measures available through the FWP game damage program. Preventative measures include materials for hive platforms and electric fencing.

The use of preventative measures should be mandatory, rather than simply "encouraged." Predator Project supports the development of legislative changes, if necessary, in order to accomplish this. Demonstrated use of all preventative measures possible should be required prior to lethal control or relocation. The final EIS should include statistics on the numbers of beekeepers in chronic depredation areas who use preventative measures, as well as on the number of ADC actions which take place even when such measures have not been taken by the beekeepers.

Element G: Continue to inform the public about the biology and habitat requirements of black bear populations via Project Wild workshops for teachers, videos, Montana Outdoors and other media outlets.

Regardless of whether or not black bear hunting continues in Montana, Predator Project supports this element, and all other educational projects which are developed.

Element H: Delineate new black bear management units to serve as the basis for black bear management actions, including hunting regulations.

Predator Project supports this element regardless of whether or not black bear hunting continues in Montana.

Element I: Adopt September 15 as the earliest opening date for the fall hunting season.

Should black bear hunting continue in Montana, Predator Project supports this element.

Element J: Adopt April 15 as the standard opening date for the spring hunting season and end the spring hunting season no later than May 31.

Predator Project is opposed to the continuation of a spring hunt, in any form. According to the DEIS, emergence of black bears in Montana from their winter dens generally occurs between March 21 and May 7. Also according to the DEIS, the last two weeks of May are when the most black bears are "harvested." Female bears with cubs emerge later than all other age and sex classes, and become increasingly vulnerable to hunters as the spring season progresses. If the spring hunt continues for political or other reasons (since it has no basis in biology), then MDFWP should end the season by May 7. This would still allow for three weeks of hunting, while greatly decreasing the likelihood that females with cubs would be accidently killed.

Element K: Step up efforts to inform people about bear biology, consequences of living in bear habitat, and measures to prevent conflicts with black bears (especially people who live in or near black bear habitat).

Predator Project supports this element. Again, preventative measures such as closed dumpsters and food storage requirements should be required in ares where black bear "problems" are common.

Element L: Actively promote good hunter ethics through expanded education of both young and adult hunters, with emphasis on the hunter's ethical and legal responsibility to be able to distinguish between a grizzly and a black bear, to identify black bears by sex and age class (subadult versus adult) and identify females with dependent young.

If black bear hunting continues in Montana, Predator Project supports this element. However, since no thorough studies have ever been done on the effects of black bear hunting seasons on grizzly bears, MDFWP should not only include a complete analysis of all mistaken identity kills, their location, and recommendations for black bear hunting closures, but also initiate a scientific study ion the subject. Finally, the EIS should include an alternative which includes an element prohibiting the hunting of black bears in occupied grizzly bear habitat i Montana. Such an alternative is biologically appropriate, and is well within the expected range of alternatives which might be included under MEPA.

Element M: Adopt the following management targets, which are designed to maintain a conservative harvest of female bears in all black bear management units:....

Should black bear hunting be continued in Montana, Predator Project supports this element.

Elements N, O, P, and Q

Predator Project supports all these four elements if black bear hunting continues in Montana.

#46 continued

Element R: Increase emphasis on records management and evaluation for nuisance bear complaints, improve coordination between the wildlife and enforcement divisions of FWP in addressing such complaints and pursue a change in statutes 87-1-231 and 87-1-234 to exempt nuisance bears and depredating bears captured at bee yards that have not been protected through electric fencing.

Predator Project strongly supports this element, and commends the Department for its development. We would only add that changes in statutes should also require that all livestock owners (including cattle and sheep operators) be required to use certain MDFWP-approved preventative measures before lethal control or relocation is approved.

Element S: Institute a public information program and pursue needed legislation designed to curtail development of chronic bear problem areas via human negligence (including accessibility of bear attractants such as garbage and bulk pet foods).

Predator Project strongly supports this element, and commends the Department for its development.

Element T: Work with Animal Damage Control (ADC) to establish a procedure for handling ADC data on depredation complaints and black bear mortalities resulting from control actions.

Predator Project supports this element, although we believe the best interests of bears and taxpayers would be served if MDFWP handled all depredating bears, and ADC was not involved at all. The EIS should include an element and alternative to this effect, along with appropriate cost analyses.

Element U: Implement regulations requiring mandatory use of the meat of hunter-harvested black bears, while concurrently promoting participation in the trichinella testing service offered by FWP and Veterinary Molecular Biology Laboratory at MSU.

Should black bear hunting continue in Montana, Predator Project supports this element.

Element V: Revise statute 87-3-102 MCA (Waste of Fish or Game).

Should black bear hunting continue in Montana, Predator Project supports this element.

Element W: Establish/revise the legal definition of baiting.

Should black bear hunting continue in Montana, Predator Project supports this element.

Element X: Clarify statute 87-3-127, which provides for use of hounds by FWP employees, ADC personnel and livestock owners to control depredating bears.

This element should be written to include a requirement that all possible non-lethal strategies were employed by the livestock owner prior to the Department granting a request for lethal control. Additionally, landowners/livestock owners should not be allowed to chase bears with dogs, either to run them off the property, or to kill them. Only MDFWP employees, or ADC employees (if ADC is used) should be able to use dogs, and then only after a) livestock owners can demonstrate that all preventative measures were used; b) all other non-lethal corrective strategies were tried; and c) hunting without dogs has proven unsuccessful. The entire statute as it will be *re-written* should be included in the EIS so that the public may review the final intent of the statute.

Element Y: Work with federal, tribal, state and corporate land management entities to establish a process for cooperatively developing black bear habitat criteria.

Predator Project supports this element **with the following change:** corporate land management entities are not biologists, and have no place in the development of black bear habitat criteria, beyond the normal amount of participation given to the public at large. Allowing timber companies, for example, to sit at the same table with agency biologists who are developing the criteria would jeopardize the biological integrity of such criteria because the corporate interests would (understandably) have the best interests of their industry in mind, and not that of the black bear. Predator Project is strongly opposed to this part of Element Y, and asks that it be removed in the final EIS.

Element Z: Produce an annual, standardized statewide report and analysis of black bear management data, to include: tooth age data, depredation and damage complaint records, ADC control actions, harvest questionnaire information, and wildlife laboratory records.

Predator Project supports this element **with the following addition:** add to the depredation and damage control complaint records a category for documenting what type of preventative measures were used, if any, prior to damage and any control actions which take place.

Thank-you for the opportunity to submit these comments,

Carla Neasel

Carla Neasel
Predator Project
POB 6733, Bozeman MT 59771
406-587-3389

#47

Myni Ferguson
395 Blanchard Lake Drive
Whitefish, MT

Black Beer EIS Comment

Mailing in letter today - applauds FWP on trying to tighten up on bear hunt - would like to see spring beer hunt benned - does not think there is biologicel information for it.

Comment Called
in 12-6-93 1PM
f more

if not more than one, therefore at times it is easier and cheaper for the beekeeper to take some bear damage and then have the bear removed through the ADC than to fence all potential bear yards.

I personally feel that as a beekeeper that I must have use of the ADC to help in maintaining my loss due to bears. I do try to electric fence my yards in known bear areas and to just fence those that are not in ordinary bear habitat (according to FW&P and the ADC). I feel that to require a beekeeper to electric fence a yard prior to getting assistance from the ADC will only create a situation were the beekeepers will be forced into using illegal means and ways to remove the bears causing damage to them. I also feel that when ADC traps a bear in a bee yard that it is obvious that the bear is guilty of the damage done to the bee yard. Also if a beekeeper fences one yard that is being hit by bears they had better plan on fencing every yard in at least that valley and probably everything within five miles of that yard or the bear just moves to the next bee yard.

Another problem with this plan and many others of FW&P is they look at what is best for FW&P, as the more bears hopefully the more trophy sized bears and more sportsman purchasing more licenses to harvest a trophy bear giving FW&P more money. As a beekeeper I do not want more bears and I want assurance that FW&P will continue to assist in my fencing. At the present time to receive assistance from FW&P a beekeeper must either have a bear destroyed at one of there yard or strong threaten to in order to receive assistance from FW&P. I feel that having ADC there to help beekeepers is a check and balance on FW&P, by having it there so that FW&P does not give adequate assistance that a beekeeper can use the ADC to control the problem and again threaten FW&P beloved bears. Once FW&P has a destroyed bear there attitude totally changes, to were they know to protect their interest in the bears they must offer assistance or have more destroyed bears. I believe this is a necessary and pertinent check and balance on FW&P.

I also feel that to keep bears initially out of the bee yards is not to difficult through fencing (not necessarily electric fencing) but once a bear has started the only solution is to destroy the bear. To move the bear just moves the problem and to electric fence all bear locations would break the FW&P buy supplies not to mention some beekeepers.

I hope that through this plan and hopefully meeting between the FW&P and beekeepers with bear problems that this issues will be addressed and resolved. I don't what to see an end to all bears or to take substantial loss in my business due to bears.

#48

DEC 06 1993

Comments on draft black bear EIS

By: Andy Orange

2751 Alpine View Dr. Laurel, MT 59044

from Orange Apiaries

As a sportsman and a sideline beekeeper I feel that proper management of the black bear is essential. I also feel that the management must be agreed upon by all groups holding an interest in black bears (sportsmen, viewers, and the livestock industry).

As a sportsman I feel that the quota system works very well and allows sports the maximum opportunity to hunt. I also feel that we need to maintain an adequate bear population but not to large to be causing excessive damage. I presently feel that in district 5 the bear population is growing and that their habit is growing with the bear populations. With this new habit growth we are know having bear-livestock confrontations in new areas. I feel that through the management plan we do not need or want to increase this habit and this can be achieved through special hunts and special quota's for non typical bear areas.

As a sideline beekeeper my most serious pest is the black bear. This past year (1993) I lost approximately 20% of my GROSS income to black bears. I had at one time 50% of my bee location being hit by black bears. The fencing supplies give by FW&P have been a help but still this is not a cure all solution. First of all FW&P don't have a fencing plan or solution that works, therefore as a beekeeper we are experimenting on what equipment works and what don't at the beekeepers expense. An example of this is the fence chargers to start with they gave us a charge that required a single 6 volt battery- they discovered that this didn't give enough shock. Then they went with a charger with 2 6 volt batteries- these needed to have the batteries changed every two to three weeks- which meant that the beekeeper had to make a trip to all yards that often or still take a loss due to dead batteries. The next solutions was to use 12 volt marine type batteries this works fairly well but a nonmigratory beekeeper I still must keep a fence up year round and when the battery dies in the winter and freezes a new battery must be purchased each year. The only charge that I found that will give adequate year round protection is a solar panel charger. I also feel that this a less expensive in the long run due to the continual purchase of new batteries. Another problem with not keeping a fence hot year round is that livestock and other wildlife will destroy the fences during the time they are turned off. As a beekeeper we must also keep in good relations with our land owners and some do not allow you to place an electric fence on there property, others require you to remove them in the winter. FW&P does supply the materials but no labor in installation and maintains. For some larger beekeepers to put up and maintain electric fence on all potential bear bee yards would take one full time person

#49

DEC 06 1993

December 1, 1993

Jim Cross
Wildlife Manager
Montane Depertment of Fish, Wildlife & Parks
490 North Meridian
Kelispell, MT 59901

RE: Proposed bleck beer regulation chenges

Dear Mr. Cross,

As en avid, lifelong beer hunter, I am taking the opportunity to voice my opinion on the proposed bleck beer regulations.

I fully support the change which would require hunters use the meet from kills. My reesoning isn't that I'm egainst trophy hunting. I see this ee a major point of many nonhunters opposition to bear hunting. We should be willing to implement this change, if only to deprive the enti's of a rellying point against black beer hunting. I firmly believe the first species we will eventually loose the right to hunt will be traditionel trophy animals like bears. Hopefully this change will delay such loss of opportunity.

I oppose closing the spring season eerlier as has been mentioned in the pepers. I understend the reason for this proposel, but also feel we will lose the most productive period of hunting of the entire year. If there were irrefutable evidence that the populetion was being hurt due to the late spring hunting period (lest two weeks in May) I would support the change. If you have such evidence I would like the opportunity to examine it.

Northwestern Montana appears to have a strong bear population. This certeinly is resulting in part to all the road closures. Considering the amount of inaccessible country, I don't feel the bear population is in any immediate danger.

Sincerely,

Fred Phillips
Box 664
Columbia Falls, MT
59912

RECEIVED
DEC 03 1993
FW & P REGION ONE

#50

DEC 03 1993

Dear Sirs:

This letter is my comments on the Draft EIS of Black Bears in Montana. I agree with alternative #1 (proposed action) and the following elements I'm concerned with. These are my recommendations for the elements.

Element I opening day of fall season be left as is.

Element J should change mountain lion chase season closes date to April 14.

Element N if inacted you should be able to have animal inspected at a different region office than the region was killed in. (example) if shot in region 1 on saturday or sunday be able to have inspected in region 4 during the next week.)

Element O if inacted should have a cut off date of August 31 to buy a license.

Longtime Bear Hunter
Bruce Turner
119 Brandywine Lane.
Great Falls, Mt 59404

#51

DEC 06 1993

WILDLIFE
ARTISTRY
by
Dan Quillen

Route 62 - Box 3110F • Livingston, MT 59047 • (406) 222-0732

Wildlife Divsion
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dec. 3, 1993

Dear Sirs;

I would like to submit my input on the Black Bear EIS that is under consideration. I believe that changes are in order and that the alternative #1 of the DEIS is the best choice with some modifications.

I agree with all of the elements except elements I,O,and U. Let me address my thoughts by each element.

Element I.

I region 3, I feel that this date is too early to be a wise use of the resource. The black bear is a "Trophy Animal" It is harvested mainly for its hide. As a taxidermist in region 3, I know that in most cases, the Black bear harvested in September are not haired out in normal years. They simply are not a desirable trophy in my estimation. I have handled hundreds of bears over the last twenty five years, and I have rarely seen a good bear taken in September. I also feel that there is a higher probability of younger bears and female bears in this region because they are still available in the berry patches even as late as Oct.1 some years. I suggest an Oct 1. opening at the earliest, and prefer an Oct. 15 opening.

Element o.

I applaud the choice of selling all Black Bear licenses individually. It is a must to have accurate information on how many hunters are interested in Black Bear hunting in Montana. But if feel that there is one glaring weakness that is overlooked. In #2 of the Element O of the EIS it refers to the "incidental" or "opportunistic" Black Bear harvest. I feel that there is no value to this recommendation unless that all Black Bear license sales are closed prior to the opening of the general Black Bear season. How can the data be accurate when a hunter

WILDLIFE
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by
Dan Quillen

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in Montana can go out and illegally kill a Black Bear and then come back to town and purchase a Black Bear Tag from any license agent? This is in my opinion the single most important item that would change the Black Bear management in Montana, and it has not even been considered in this EIS? In my opinion, there are almost as many Black Bear taken illegally by this means, as are taken legally. I especially feel this is true of the fall seasons. Please consider making all license sale for Black Bear terminate on April 14th of each year. This will allow for accurate information on numbers of Black Bear hunters and also stop the "slob" hunters from having opportunity to harvest bears illegally and tag them after the fact. 51-1

Element U.

The Black Bear is classified as a "trophy animal". If there is to be a requirement to force the hunter to use the meat of this animal, then you must also include Mt. Lion in the action. With the incidence of Trichinosis in Black Bear I feel that I would be unwise to have mandatory use of Black Bear meat. If MDFWP forces hunters to utilize bear meat and someone does not have it tested, and contracts Trichinella, I wonder if the Dept. could not be open to a lawsuit for damages or medical expenses? I suggest simply that the MDFWP offer recommendations to utilize the bear meat, but do not make it mandatory. I strongly suggest that educating the public on the dangers of consumption of Black Bear meat be continued and testing of the meat be mandatory prior to human consumption.

In conclusion, I feel that if the Alternative #1 is adopted, that there will be a marked decline in the number of young and female bears harvested over the next few years. This will allow for a consistent management program for many years to come. Quotas are a last approach along with drawing for licenses. Slowing the harvesting of immature and female bears will be aided by shortened seasons, especially the fall season, and by limiting the illegal harvest of bears by limiting license sales to prior to any season opening.

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by
Dan Quillen

Route 62 - Box 3110F • Livingston, MT 59047 • (406) 222-0732

I feel that with added enforcement of illegal harvesting of bears, that Black Bear hunting in Montana can be enjoyed for many years to come.

Thank you for the opportunity to give my ideas and opinions.

Sincerely,

Dan Quillen

#52

DEC 07

3-DEC-93

F&P:

Thank you for allowing comments on the black bear season. I would like to comment on one particular aspect.

The 4 year ending date for hunting except in certain limitations - Bozeman area where because of cities, larger corridors, many bears do not emerge until late May. So in effect you are closing the spring season or shortening it to maybe a week. The year 15 ending date in this area may be a more realistic date & still protect the female population.

In other areas of the state the May - 15 or June 1 ending date appears realistic.

Thank You,
Tom Weiss
Kalispell, MT

#53

DEC 07

12-5-93

Dear Fish & Game

- I request that all of your decisions are based on sound wildlife management and respect the freedom given to us as free American, under the U.S. Constitution. Also:
- Extend the black bear season back to all summer long or less.
- Government agencies should have hunters kill problem bears when all they belong to the people.
- Give the people back our rights to sell, give or trade all legally taken bear parts, not just a few.
- Let the individual decide whether to eat the meat or not. You need to realize that if the meat is left in the field it doesn't go to waste. Other animals make good use of it.
- Stop letting self serving special interest groups or individuals dictate their personal hunting ethics and preferences on the rest of us.
- If a person chooses, let them hunt with bait, dogs or however.

Thank you for your consideration

Dan Sellers

538-7634 Home
" 7401 work

P.S. Please send me a copy of the Draft EIS Plan to

Dan Sellers
Rt. 2 Box 2329
Lewistown, MT.
59457

#54

Box 404
Big Fork Mt
59911

Wildlife Division
Montana Dept. of Fish, Wildlife & Parks

This letter is in response to the DEIS for the management of Black Bears in Montana. I live in an area outside of Big Fork bordering Federal & State Lands. We have had many hunting infractions in this area — the most constant & serious happening in the Spring during the hunting of Black Bears. Every year for the past 4 years there are orphaned Black Bear cubs wandering the area — staying close to Bear Creek Road — standing by "Sut piles" that are apparently their Mother's. Last Spring on May 12th a Black Bear Sow was killed leaving 3 orphaned cubs up a cottonwood stag. We had a lot of contact with the Kalispell Fish & Game office over that incident. The cubs were not recovered & I spoke with a wildlife rehabilitator in Kalispell who informed me that most of the cubs that are recovered & end up in Helena are put to sleep anyway — after the time & money spent to take care of them for 6 months — because of the fear that they would eventually become problem bears & no one wants them in their area. I was also told by a Warden in the Kalispell office that most of the cubs orphaned in the Spring are destroyed because of the inability to hibernate successfully as well as the fear that they will become problem bears. There was also another year old cub orphaned here last Spring that wandered the road where his mother was killed for days & was eventually shot by a hunter.

I also understand that a Black Bear decoy was set up in the Missoula area last Spring to see if hunters would notice that it was a female with cub decoys behind her. She was continually shot at throughout the season. One of the Wardens in the Kalispell office told me that he was personally against the Spring Black Bear hunt because many hunters don't take the time to see if the bear is a sow or not & that's it's almost impossible to tell anyway. And that even if it is a sow she may have stashed her cubs somewhere or they may be up a tree & the hunter wouldn't see them. I have noticed that most Black Bear hunters up here hunt from their vehicle anyway & most bears are killed by the road where the grass is. Grizzly Bears are also shot by mistake & for all of these reasons I think the Spring Black Bear hunt should be eliminated.

I commend the Montana Dept. of Fish, Wildlife & Parks for taking the time, effort & money in trying to do what is best not only for our natural resources but for hunting in general. My husband is a hunter but a responsible one. We depend on deer or elk meat every year. Deer & elk aren't hunted in the Spring. I think that the Spring Black Bear hunt draws a lot of negative attention to all hunting.

Thank you for allowing the public the opportunity to respond to the DEIS. I greatly appreciate & applaud your efforts. I am hoping the Spring Black Bear hunt will end.

Sincerely,
Diane Paulsen

#55

DEC 07

December 3, 1993

Dept. of Fish Wildlife & Parks
Wildlife Division
P.O. Box 200701
Helena, Mt. 59620-0701

Re: Black Bear Regulations

Dear Sir/Madam:

As an interested sportsman and hunter of bear I am taking the opportunity to voice my opinion on some of the proposed changes in the bear regulations as expressed in the draft EIS and as appeared in The Missoulian, Dec. 2, 1993, Sec. C, Page 2.

I would support the change requiring hunters of bear to utilize the meat that is harvested to the best of their ability to do so. While the weather during the season can be a deterrent even with the best of handling, the advantages of such a regulation far outweigh the disadvantages. The casual hunter of this specie, knowing that the meat must be utilized, will I believe be less likely to hunt the specie or be more knowledgeable if he/she does. While we will never be able to totally avoid human error in misidentification of the specie or the sex, we can with this regulation discourage some opportunism amongst the casual hunter.

If the meat taken is to be consistently tested in each case, I would not support the adherence to the above policy if indeed the carcass was found to be infected by trichinosis. The hunter should not be penalized for what is to be considered an act of God, or because he had no prior knowledge as to the status of the meat. Not utilizing the infected meat in this instance should be at the discretion of the hunter.

I would "not" support the discontinuance of selling bear licenses in the combination sportsman's hunting license. I have purchased a sportsman's license the last decade and have found it to be a convenient manner in which to purchase the licenses required to enjoy the sport of hunting. The availability of such to the sportsman has also cut down on the work required by the seller of the licenses as well. In the past years when a bear tag was considered a given because of the break in costs--one might deduce that the casual hunter was more prevalent. However, at the point that the licenses were sold on par, with the individual licenses, it hardly encourages casual hunters. Let's leave the combination sportsman's hunting licenses "as they are".

I would "not" support the suggested requirement that hunters would have only five days instead of the present ten day option to present the heads and hides for inspection. In some cases it could take up to three or four days to get the animal out of the kill area. That leaves little time for the hunter to properly care for the meat when out of the back country. It also leaves

to the interpretation what areas would or would not be considered wilderness areas. What may be non wilderness to some could be considered such by others for their physical abilities, age or length of walk-in hunting areas are such requiring more time for that individual to comply with all regulations. Latitude and a consistent requirement for all back country or wilderness kills must be given, and the ten day rule would seem to satisfy these.

A uniform beginning date for the spring season is not objectionable nor the ending date of May 31 of each year. However delaying the fall season to mid-September would seem to lack consistency of purpose and organization. It seems to me that it would be much easier to start the general bow season, bear and upland bird at the same time as it is now. The bear hunter should not be intimidated by the bow hunter as regulations for "closed areas", clothing color, "evidence of sex requirement", "hours", etc. are uniform. Likewise, the bow hunter should not be intimidated by the bear hunter as most bear kills I have witnessed are within walking distance or near a closed road, while the bow hunter is more likely to be farther in the back country. Mutual respect between the two parties has generally been the standard not the exception in any camps I have been a participant in.

As long as we are dealing with humans, the chance for mistakes is part of our character. The chance for killing a sow with cubs still will remain despite regulation, and the chance for misidentifying a grizzly for a black will still exist for some, regardless of our efforts. These two scenarios, while a concern, should not be the over-riding driving force in "over-regulation". The grizzly population in the Northern EcoSystem would be by all standards considered recovered by the goals set forth in their recovery plan. The black bear continues to grow in numbers because of the secondary protection they are receiving as a result of grizzly bear protection.

In conclusion, let me say that from my personal observations in various drainages, it appears that Northwest Montana's bear population is in good shape. Much of their success is due to strong State management and a hunting program that has complimented the objectives of both conservationists and sportsmen.

Sincerely,

D.W. Williams
243 Goat Trail
Whitefish, Mt. 59937

#56

NORTH FORK PRESERVATION ASSOCIATION

DEC 07

P. O. Box 4 Polebridge, MT 59928

6 December 1993

Wildlife Division, FWP
Box 200701
Helena, Mt. 5960-0701

Dear Fish, Wildlife and Parks,

The black bear DEIS has many good things in it for bears. However, the spring bear hunt bothers me. Young black bears lose their mother when a hunter doesn't realize the sow has cubs during the spring when all bears are ravenous having just spent the winter hibernating.

Ten years ago in the North Fork an all-black, fully grizzly was mistakenly shot for a black bear, and when the hunter saw the large claws, he panicked and shot the tiny bear which weighed at most 30 pounds. It was discovered because of a blood trail. How many black-colored grizzly bears are shot this way that no one knows about? Captain Warden Louis Kie said at the time, "Maybe we will have to do away with the spring bear hunt." Ten years later closing the spring season at least in grizzly country is still a good idea.

Sincerely,
John Frederick
President, NFPA

A nonprofit corporation dedicated to preserving the integrity of the North Fork of the Flathead Valley on the western edge of Waterton/Glacier International Peace Park.

#57

DEC 07

Susan Donnelly
319 Trinkus Lane
Bigfork, Montana 59911

Wildlife Division
Montana Dept. of Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620-0701

Re: Draft EIS Spring Bear Hunt

Greetings:

My family and I are strongly opposed to the spring bear hunt -- grizzlies or black bears. We are not opposed to hunting. In fact, three of the four members of my family hunt deer and elk every year. Nor are we opposed to a fall bear hunt. However, a spring bear hunt makes absolutely no sense, and is in fact cruel. Killing bears who have just come out of hibernation, when they are essentially starving and strongly motivated to seek food, perhaps in a less wary fashion than they would normally utilize, is hardly a sporting proposition. The bears are too biologically vulnerable in the spring to be hunted. Only five or six of the 28 states that have bear hunting allow spring hunts. It's time Montana stopped this unsportsmanlike practice as well. In the area where I live, the Swan Valley, three cubs starved to death near Bear Creek this last spring. It is very difficult to tell if a bear has cubs with her. I've seen mother bears send cubs up trees, and I also know that the mothers will sometimes leave cubs in the brush while they forage. A hunter cannot possibly be sure that he is not shooting a sow with cubs.

My family would like to see the spring hunt halted. We strongly support FW&P's prohibition on the use of hounds and bait for "hunting."

Thank you for the opportunity to comment.

Sincerely,

Susan Donnelly
Susan Donnelly
(Mrs. Greg Donnelly)
Kara McChesney
Sandra Fitting, Whitefish mt.
Laura Scott, Bigfork, MT

#58

DEC 07

Tom Radandt
Apt. A-2
1420 Worden
Missoula, MT 59801

12-6-93

Don Childress
Wildlife Division
MTFWP
P.O. Box 200701
Helena, MT 59620-0701

Dear Mr. Childress:

Thank you for the opportunity to comment on the Draft EIS on Black Bear management. I will make my comments as brief as possible.

Removing the black bear from the sportsman's license is an excellent idea. This will reduce the opportunistic mortalities.

I am concerned with your proposed allowable mortalities of female bears. Even if the hunting season is shortened in accordance with the proposal, the season will be 10 1/2 weeks long. This season would be longer than any ungulate season in Montana. Black bears reproductive rate is significantly lower than that of deer and elk. The season length should reflect that difference.

In the draft, you cite Beecham recommending 35% or less harvest rate. Then Element M, part a) notes no more then 40% of the annual harvest comprised of females. I feel this is a very liberal interpretation of the data; we should target 35% mortality not 40%. From current research in northwest Montana, female black bears have a high rate of unreported mortality. Illegal female mortality equalled known legal hunting mortality (Kasworm, 1993, Pers. comm.). Therefore, I recommend an upper limit of allowable female mortality of 35%.

58-1

Sincerely,
Tom Radandt
Tom Radandt

#59

DEC 07

Wild Allan Mountain
P.O. Box 305
Conner, Montana 59827

12/9/93

DEAR SIRS - INCLUDE MY COMMENTS IN THE DEIS ON BLACK BEAR MANAGEMENT. PLEASE RESTRICT THE HUNTING OF BLACK BEARS IN A FASHION TO REDUCE ACCIDENTAL DEATHS OF GRIZZLYS.

THE HUNT OF BLACK BEARS SHOULD BE DISCONTINUED IN OCCUPIED GRIZZLY BEAR HABITAT.

SEPTEMBER 15 SHOULD BE THE EARLIEST DATE TO OPEN THE FALL SEASON TO ALLOW MORE LATE-SUMMER BEAR SEASON TIME FEEDING BEARS GETTING READY FOR FALL/WINTER.

THE SPRING HUNTING SEASON SHOULD BE CUT BACK TO ONE MONTH - FROM APRIL 15 - MAY 15th

THANK YOU
CHARLES MARRIOTT
5677 WEST FORK
DARBY MT
59829

#60

DEC 07

THOMAS MCCLOSKEY
21575 CON. FERRY DR.
HUSON, MT. 59846
DEC 3, 1993

To Whom it May Concern,

I just finished the draft EIS on Black Bears & found it very complete. I am giving my support for the Alternative #1 proposed action.

My only concern is with element O. As it was brought up that it would reduce FWP revenues because of a decline in sportsman licenses sales. The money that is gained by these sales for habitat protection is of crucial need today.

Your rationale for element O is good but with the decision resting on the legislature I am afraid that a huge drop in sales can not be corrected in a timely enough fashion. Therefore a huge drop in habitat protection would be felt.

Yours Truly
Thomas J. McCloskey

#61

DEC 07

12-5-93

Dear DFWP:

Please consider this letter as my formal response on the Draft EIS on black bear management in MT.

I support Alternative #2 (Termination of Spring Black Bear Hunting) for the following reasons:

1) Impacts to Grizzly bear populations from identification "mistakes" made by spring black bear hunters will be reduced.
2) Fewer black bear cubs will be orphaned; this is a more humane approach and provides for better management opportunities.
3) Fewer bears will be hunted resulting in larger black bear populations, which I feel need to be increased. I spend a lot of time in the back country & have few or only sightings of bears. I don't feel comfortable that DFWP has a safe handle on black bear management in MT because much information about black bears is unknown.

I want to see more black bears on our public land, and I think most Montanans would agree. Please make your decision with the best interests of the black bear in mind. Thank-you.

Christine Devery
540 Breckenridge
Helena, MT 59601

#62

1003 9th Street East
Whitefish, MT 5937

DEC 07

December 2, 1993

Montana Fish Parks and Wildlife
Attn: Wildlife Division
P.O. Box 200701
Helena, MT 59620-0710

Sirs:

Please accept my comments on the Spring Black Bear Hunt. I believe this is a hunt which should be discontinued. It is extremely difficult to keep cub bears from being orphaned during the spring season hunt, leading to unnecessary and cruel treatment of the offspring of destroyed mothers. Autumn bear season allows more chance for survival: the animals have had the summer to fatten and mature. There exists some chance for youngsters to survive, when compared to the spring season which insures the death of the offsprings when separated from their sow.

Spring black bear season should be discontinued as a management tool.

Thank you.

Sincerely,

Thomas K. Harding

#63

Black Bear CTS — Dec-2-1993

Wildlife Division
Montana Fish Wildlife and Parks
P.O Box 200701
Helena, Montana
59620-0701

Been hunting & trapping since 1946, born 1934
Hunting wasn't sport then,

About the black bear, NO Hunting of bear in the Springs By Anyone, unless He has a permit
In the Fall, mid September, ok

The comment's, is for bear only. But ~~needs~~ say more
Anyone caught selling- Any part of a game animal Bear Elk, Deer, Goat, Sheep, moose, including Horns,- Should not be Allowed to Hunt or fish in the state of Montana, for ever.

We need to take care of this gift we have in Montana, Hunting & fishing

Wasting of game, Found one cow elk, and one deer this year, Would like Heard what others Found.

The population is growing in Montana, need Save more sportsmen this year, Than last.
Would Like to see Three general season's
1- Bows & Arrow - Areas
2- Black Powder- Areas
3- Metalic cartridges - Areas
And you hunt with one device only.
And off years by, shot Gun only, slugs- You get 1- Deer either Sex, And One Elk either sex
All other Game animals, Metalic cartridges would be used

There should be a Caliber Law
180 Gr Bullet at 2700 feet Per Sec. or better

No more of this M-L 30 Cal carbine shit, I said This year, He said his deer got away,
The poor thing is still proably laying somewhere Sick

Test All Bow Hunters
Test All Hand Gun Hunters

Seen more Lion Track's This year
Way to many coyotes - The deer crop will go down.

Ted Knoles

Ted Knoles
3030 Willie Dr
Helena MT 59601

#64

Draft Bear EIS
Wildlife Division
PO Box 200701
Helena MT 59620-0701

DEC 07

I would like to comment on your new bear hunting ideas. First I think bears have been a little over looked by FWP as they are not as popular a hunt as other game and I am glad to see more interest in their populations. FWP needs better control of harvest and info. as the push to stop hunting seasons by the mis informed will not stop. The more you have and the better the control on seasons and quotas (male & female) the better we all will be if a push comes to stop bear hunting in Montana.

I like your ideas on the earlier spring start off and later start for fall seasons. I think this will help a lot on sow numbers in the bag. the one on consuming the meat may meet a lot of opposition as people have a problem with eating bear meat. I personly have harvested two bears in years past and used the meat to make some super sausage and no one was the wiser to its content.

One idea that may help is to take the bear tag off of the sportsman package. This will make people who want to hunt bears <u>have to</u> buy a license rather than just get one handed to them. It will reduce the cost of the sportsman license and may get more people to buy them which will reduce paper work.

I am sure the restrictions on baiting and use of dogs will remain. I was happy to see mandatory kill reporting and quotes on sows per district as this gives you a chance to shut a district off before any damage is done to the population. I personaly would like to see it mandatory that a game harvest for all species be returned by every hunter after the season as this would take a lot of guess work out of what going on out there. Other state have it where you must return your harvest report before you can apply for special permits in the spring.

All and all I think with a few changes in season dates and license purchasing requirements bear hunting will only get better.

Thanks for the chance to comment
Please send me a copy of the EIS

Tim Royston
Box 2031 MCR
Clancy MT 59634

#65

DEC 07

December 2, 1993

Wildlife Division
Montana Department of Fish, Wildlife end Perks
P.O. Box 200701
Helena, Montana 59620-0701

Dear Commissioners:

The purpose of this letter is to urge you to ben the practice of hunting bleck beers in Montana.

Hunting of the bears is edditional strain on a species already threatened by encroechment, negligence end ignorance. Their exists no scientific reeson to hunt black bears. It is a habit. It provides only short term satisfection to those who hunt.

The Montana environment must be managed in the best interest of its fragile end threatened ecosystem. Stop the prectice of hunting bleck bears.

Thenk you for acting in our altogether best interest.

Sincerely,

Steve Hebard, Resident
Whitefish, Montana
7201 Farm to Market Rd
/SH

#66

DEC 07

Aida Hebard
7201 Farm-to-Market
Whitefish, MT 59937

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

December 2, 1993

I would like to submit the following comments in regard to the FWP's draft EIS for managing Montana's black bear. In fact, I oppose all hunting of black bears and would favor alternative #4. The black bear population is and has been under alot of pressure, obviously due to habitat loss and increased harvesting. It is today the number four game species. Management of black bear populations have remained the same yet there has been no official population study done since about 1966. Based on personal observation and conversation with conservationists and sportsmen alike, the number of black bears, even in areas where habitat is adequate, has decreased at an alarming rate.

At the very minimum, I support the FWP alternative #2 to eliminate the spring bear hunting season. Although Montana has identified the need to ban bear hunting with hounds and baiting, it is one of only six states still permitting a spring bear hunt.

There are many reasons in support of eliminating spring black bear hunting. Even many sportsmen don't know why there is a spring bear hunting season and are opposed to it, specifically. The spring bear hunt poses a risk to grizzly populations, both in terms of identification difficulty and shared habitat. It leaves an unaccounted for number of cubs orphaned--directly decreasing the bear population. Rehabilitation of cubs is difficult and not readily available. And, there is little justification today for harvesting bears at all other than for the "sport" of killing them.

In conjunction with the new management direction set forth by the Montana Department of Fish, Wildlife and Parks, now is an opportune time to change outmoded policy. As one purpose of FWP is to provide the greatest amount of recreation to the greatest number of people, the spring bear hunt is definitely <u>not</u> fulfilling that purpose, but then is any bear hunting at all?

Sincerely,

Aida Hebard

DEC 07

#67

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Carl A. Templeton
Lincoln, Mt 59639
Dec. 3, 1993

DEC 07

#68

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Francis J. Pierce
803 College Ave
Deer Lodge, Mt
59722

DEC 07

#69

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701
Dec. 1, 1993

Dear Sirs:

I have read over the EIS on management of black bear in Montana. My proposed action would be alternative #5, (no action). Please leave things as they are.

Sincerely yours,

Margaret Pierce
803 College Ave
Deer Lodge, Mt
59722

#70

DEC 07 [redacted] PAGE 1

****

COMMENT FORM

****

NAME: VERN DAVISON

ADDRESS: 1760 LABRANT Rd BIG FORK MT 59911

AFFILIATION: RESIDENT MT HUNTER

Please provide your comments below. Attach additional sheets to this form if you wish.

IF A HUNTING QUOTA CAN BE ESTABLISHED APART FROM ANY OTHER KILLS, OK. (THE GRIZZLY QUOTA SYSTEM WAS A JOKE)
I LIKE TO DO A LITTLE SPRING HUNTING, EVEN A ONE WEEK SEASON WOULD BE OK BUT I WANT IT IN LATE MAY NOT FEB. OR MAR. WHEN ITS A WASTE OF TIME.
ALSO, I HUNT THE BERRY PATCHES ALOT IN THE FALL AND EVEN SEE A BEAR ONCE IN A WHILE BUT IT SURE AIN'T A SURE THING. I HIKE TO ALOT OF BERRY PATCHES AND DON'T SEE NOTHING. I THINK MAKING BEARS A SEPERATE LICENSE WOULD CUT BACK THE FALL KILL PLENTY. NOT THAT MANY PEOPLE HUNT BEARS SPECIFICALLY, THEY BLUNDER INTO THEM HUNTING OTHER THINGS.
FURTHER MORE ON PAGE 49 FIGURE 8 I DO NOT SEE A DOWN HILL TREND, ONLY A WAVE ~~~~.
I DO NOT THINK IT IS HEALTHY FOR HUNTERS AS A GROUP TO GO ON THE DEFENSIVE WHEN THE ANIMAL RIGHTS JERKS SAY BOO. IT DIDN'T HELP FOR BUFFALO, IT DIDN'T HELP FOR GRIZ, IT WON'T HELP FOR BLACK BEAR. WE ARE DOING NOTHING TO BE ASHAMED OF. CAN WE NOT SUE THEM FOR ATTACKING US? WHY CAN THEY WIN IN COURT ON EMOTIONAL PLEA'S ALONE? I FIND THIS VERY FRUSTRATING.

gen\com.for

DEC 07 [redacted] PAGE 2

****

COMMENT FORM

****

NAME: VERN DAVISON

ADDRESS: 1760 LABRANT Rd BIG FORK MT 59911

AFFILIATION: RESIDENT HUNTER

Please provide your comments below. Attach additional sheets to this form if you wish.

I AM LEERY OF ANY BEAR MANAGEMENT SYSTEM THAT CAN BE USED AGAINST HUNTING. FOR EXAMPLE HAVING LOW QUOTAS TIED IN WITH OTHER MORTALITYS SO COME SEASON THERE IS NOTHING LEFT TO HUNT AS PRETTY MUCH HAPPENED WITH GRIZZLY HUNTING.
ALSO IT APPEARS TO MANY HUNTERS I TALKED TO THAT FWP IS BEING OVERRUN WITH ANTI HUNTING ZEALOTS AND WE DO NOT TRUST FWP MOTIVES IN WANTING CHANGES. I HAVE BEEN TO TWO BEAR SEMINARS UP THE NORTH FORK (BEAR/WOLF) AND FROM THE TONE OF THE SPEAKERS I UNDERSTAND THE CONCERN. ANY ASSURANCE [redacted] YOU CAN GIVE TO THE LONG TERM (10-20 YRS) CONTINUATION OF BEAR HUNTING WOULD HELP US ALL.

THANK YOU
Vern Davison

gen\com.for

#71

DEC 07 [redacted]

To Mt. Fish and Wildlife

From Pete Finwall
27 Roundup Dr.
Billings, Mt. 59102

Re: Black bear EIS

Thank you for letting me review your well thought out paper.

I think well of the proposed solution.

How many bears are killed by Indians on their Reservations? Is the number just not eneough to worry about? They don't need to observe the rules, do they? 71-1

I think the female harvest upper quota should be lowered. Apparently it is not usually reached now. I think it should be at a level where it is likely to be reached every year. Else how is it effective?

Is there any way to tell male from female without turning it over?

Once a bear has been legaly taken, why can't the taker use or not use any body parts the way they want? Including selling stuff, leaving meat, or dancing around it with feathers on?

Again, thank you for letting me take part.

Peter A Finwall

#72

DEC 07 [redacted]

Dave & Diane Pauli
4235 Zephyr Lane
Billings, MT 59106

December 6, 1993

Wildlife Division
Montana Department of
Fish, Wildlife & Parks
P.O. Box 200701
Helena, MT 59620-0701

We have reviewed the November 1993 draft EIS on management of black bears. We were glad to see MFWP's responsible decision to not conceider the bear hunting expansion alternatives (bait/hounde) for further analysis.

Our preferred final EIS format would be the termination of spring bear hunting and the later opening date for the fall season. This would protect the bear population during two critical periods (lactation and berry gorging).

Our secondary choice would be Alternative #2 which would both protect sow/cubs and eliminate the primary need for expansion of ursine rehabilitation facilities.

Thank you for the opportunity for input.

Sincerely,

Dave + Diane Pauli

Dave and Diane Pauli

DEC 07

United States Department of Agriculture

Animal and Plant Health Inspection Service

Animal Damage Control

P.O. Box 1938
Billings, MT 59103

Comm: 406-657-6464
FTS : 585-6464

#73

December 6, 1993

Don A. Childress
Administrator, Wildlife Division
Montana Department of Fish,
Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dear Mr. Childress:

Thank you for giving USDA/APHIS/Montana Animal Damage Control (ADC) the opportunity to read and comment on the Montana Department of Fish, Wildlife and Parks (FWP) Draft EIS - "Management of Black Bears in Montana."

In the DRAFT EIS, FWP acknowledges that it will supply preventive control materials to apiarians suffering bear depredations. I believe ADC personnel could assist FWP by encouraging apiarians to use preventive control (electric fencing). The following should be given serious consideration if apiarians are encouraged to use electric fencing or other proven preventive measures befors a problem bear can be lethally removed:

1) Designate a FWP official from each region to be responeible for implementing the preventive program.

2) Guarantee that supplies of electric fencing and other materials, including replacement components, are readily available for individuals euffering bear losses.

3) Provide supplies and labor for a one-time installation of electric fencing.

4) If problem bears are to be relocated:

   a) Which agency is responsible for relocation?
   b) Who determines relocation sites?
   c) Who is liable for any additional damages caused by relocated bears?

73-1

I believe our agencies are currently working together very well to resolve bear damage complaints. I want to see this continue and am offering our assistance by encouraging apiarians to use preventive measures (electric fencing) and by providing you with statistical information. By providing them with education, apiariane will rely more on preventive measures to resolve their black bear probleme. This approach would benefit the black bear population more than limiting ADC's assistance to only those who use electrical fencing.

I believe viable populations of black bears can be maintained and human conflicts can be kept to a minimum.

Sincerely,

Larry Handegard
Larry Handegard
State Director

APHIS—Protecting American Agriculture

#74

DEC 07

Rodd Gallawsy
Jill Davies
14 Old Bull River Rd.
Noxon, Mt. 59853

Dec., 6, 1993

Don Childress
Wildlife Division
Mt. D.F.W.& P.
PO Box 200701
Helena, Mt. 59620-0701

Dear Don,

We have read the Draft EIS on mansgement of black bear pop's in Montans and heve a few comments. We congretulate you on your attempt to plece the viability of black beer populations above sconomic considerations. As more and more people move into ths state, the spring beer hunt becomes lees end less acceptable. Therefore ws urge you to select Alternative 2.

Thank you for making this opportunity for us to comment.

Sincerely,

Jill Davies

Rodd Gallawsy, Jill Davies

P.S. We also feel the chase season for mountsin lions is unacceptable.

Rodd Gallawsy

#75

DEC 07 93

Dec 1, 1993
PO Box 985
Brookings Or
97415

Dear Mr Taylor:

My wife & I are looking forward to moving to Montana. We subscribed to the Helena Independent Record to stay informed about your state.

After reading the article, "Black Bear hunting Changes eyed" I would like to offer a few suggestions.

1 If you would take the restrictions off bear hunting using hounds, it would make it easier to identify the bear species & their sex, also lessening the possibility of sows being taken, a bears sex being easier to identify in a tree. In doing so, your concern about your sows would be considerably lessened.

II

#2 Revise your non-resident bear tags to 1/sc^d. Also require that non-residents have a qualified guide. Your local guides should easily identify a large bear over a sow.

#3 Use if your state is having a sharp decline in the black bear population you could consider hunting only even numbered years & not on uneven.

Please sir, Keep in mind that a bear is a major predator & if allowed to increase to much in number you will see a rapid decline in your deer, elk, moose & antelope, as the young are completly vunerable in the Spring.

I am deeply concerned about your considering forcing hunters to eat the bear meat, in doing so you could

III

leave yourselves wide open for a law suit. Bear meat, if not cooked properly could cause Trichinosis.

My information comes from 33 years experience. I was a professional hunter in Alaska for 20 years & also 13 years in Oregon. During this time I have worked very closely with one of Oregons most respected Taxidermist, Who is called upon by our State Game officals for his knowledge concerning wildlife.

I am deeply concerned for the balance of our wildlife.

Respectfully
Capt. Martin Hansen
Retired Charter Boat & Skipper

P.S. Please send me a copy of your E.I.S.

#76

DEC 07 93

Robert D. Stone
2430 Swan Highway
Bigfork, MT 59911
December 2, 1993

Wildlife Division
Montana Dept. of Fish Wildlife and Parks
PO Box 200701
Helena, MT 59620-0701

Dear Sirs:

I wish to comment on your Draft EIS on Black Bear Management. For a number of good reasons I think you should stop spring bear hunting. The specter of orphaned cubs starving to death sickens hunters and non-hunters alike. When it happened to three cubs last May in my neighborhood, it was small consolation to have one of your employees say that it was just a young man who made a mistake. Cubs are not always visible to hunters. A sow often senses danger and sends her cubs into hiding or up a tree before the hunter sees her. The adrenalin rush that accompanies a shot at a bear is similar to the celebrated "buck fever" that causes so many hunters to screw up shots at trophy deer. As long as we are willing to turn young, inexperienced hunters loose in the woods we have to expect irresponsible and unsportsmanlike behavior from a certain percentage of them. An animal like a bear can bring out the worst in someone who is hungry for a trophy.

Responsible sportsmen and people who dislike hunting have some things in common. We all wish to minimize cruelty. By setting up the conditions under which cruel incidents can occur, hunters are eventually put in the position of being attacked for behavior that is indefensible. There is a certain amount of paranoia these days about a total ban on hunting. If these fears are justified, those of us who wish to continue to hunt should be weeding out all the aspects of our sport which we are not willing to defend. I am not willing to defend a spring bear season which every year makes it possible for newborn bears, which look like every kid's first toy, to suffer a lonely, lingering death.

I am pleased to support your continued prohibition of the use of dogs and baiting of bears.

Sincerely,

Robert D. Stone

Robert D. Stone

P.S. If you ask your wardens, off the record, you will find some of them also oppose the spring bear hunt.

#77

DEC 07

221 East Alder St
Missoula, MT 59802
3 December 1993

Don Childress
Wildlife Division
MT Dept of F,W,&P
Box 200701
Helena, MT 59620-0701

Dear Don,

I first want to thank you and your staff for a through and informative treatment of black bear management. Because I oppose black bear hunting, my comments can be brief. I consider black bear hunting a trophy sport. Whatever requirements might mandate hunters "use" bear meat, these requirements can only force hunters to carry the meat out of the woods. What they do with it then is of course unknown. Even if this were not true, many aspects of bear management are problemstic. The difficulties of accurately assessing bear populations, telling males from females, or distinguishing grizzly from black bears are all serious problems with no clear solutions. If black bear hunting is to be continued, and I've no doubt it will, I would at least hope that the spring hunt will be eliminated. This one measure would help minimize all these problems.

Sincerely,

Jerry Grubbs

#78

Greg Faul
POB 1210
Sidney, MT

Comment on Spring Black Bear Hunting Season he read about in the newspaper - he did not know about the EIS but we will add him to the mailing list.

Against changing spring bear hunting. Considers it a tradition in Montana and has watched the concessions that have been given up with the bison and grizzly (I did talk to him about what happened with the grizzly season, federal government, etc.).

Lived in California for awhile and has seen what happened there and does not want the tradition of hunting in Montana changed in the future.

He has hunted black bear for eight years and has only seen a total of three grizzly bears - he feels hunting protects blond black bears because people usually don't shoot them because they think they are grizzlies.

There are enough restrictions now in place including road closures, not allowing dogs or baiting like in a lot of other states and provinces. More serious hunters are out their now because of road closures.

Hunters are spending a lot of money now hunting black bears. He things he spends $500 - $1,000 each year.

Received AM 12-7-93

#79

DEC 14

HSUS

December 7, 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
1420 East Sixth
Helena, MT 59620

To whom it may concern:

I would like to comment on the Draft Environmental Impact Statement (DEIS) for the Management of Black Bears in Montana. I am submitting these comments on behalf of the more than 1.8 million members and constituents of The Humane Society of the United States (HSUS), including 4,137 who reside in Montana.

The HSUS endorses Montana's commitment to preventing human/bear conflicts and we support your proposal to discourage lethal methods of solving black bear conflicts with humans until non-lethal methods have been utilized fully. The HSUS also appreciates every effort that the Department of Fish, Wildlife and Parks (DFWP) has made to prevent illegal kills of black bears in Montana. We feel it is important that enforcement of prohibitions on the sale of bear parts remain a central focus of bear management programs.

We also strongly support DFWP's proposal to tighten the statutory definition of baiting, so as to allow more effective prosecution of instances of this unethical and destructive practice.

However, we do have some concerns regarding Montana's management of black bears.

First, The HSUS strongly objects to spring season bear hunting. Bears are particularly vulnerable during the spring season as they emerge from hibernation. We are also particularly concerned about the inhumane death experienced by dependent cubs whose mothers may be killed or from whom they may become separated during a spring hunting season.

The Humane Society of the United States
2100 L Street, NW, Washington, DC 20037
(202) 452-1100 FAX (202) 778-6132

Second, The HSUS believes that archery hunting is inhumane. In many studies of deer hunting, the use of bows and arrows is associated with significantly higher wounding rates than is hunting with firearms. One such study, conducted by the Texas Parks and Wildlife Department, ("Archery wounding loss in Texas," 1987) indicates a 50 percent wounding rate of white-tailed deer by archery hunters.

The DEIS states (and other documents confirm; see California Department of Fish & Game, 1991, Final Environmental Document, "Tule elk hunting") that there are no modern studies of wounding of black bears by archery hunters. In the absence of any data to show that archery hunting of black bears is humane, The HSUS feels that it is inappropriate for DFWP to simply dismiss humane concerns by professing ignorance. By permitting archery hunting, DFWP appears to be more interested in increasing license sales and hunter opportunity and satisfaction than managing wildlife for the benefit of the wildlife itself. 19-1

Finally, The HSUS opposes the hunting of black bears in occupied grizzly bear range. It is the Department's responsibility to minimize all threats to grizzly bears. Therefore, the loss of any members of this species due to hunting accidents is totally unacceptable and, indeed, easily avoidable. The best way to ensure that grizzly bears are not killed after being mistaken for black bears is to prohibit the hunting of black bears in grizzly bear range.

We appreciate this opportunity to comment.

Sincerely,

Allen T. Rutberg

Allen T. Rutberg, Ph.D.
Senior Scientist
Wildlife and Habitat Protection

ATR:eab

#80

E. F. & C. F. PRACH
110 GOAT TRAIL
WHITEFISH, MT. 59937

DEC 07

Dec 2, 1993

Wildlife Div. MDFWP
P.O. Box 200701
Helena, MT 59620-0701

Dear Sir:

It has been brought to my attention that you are studying the matter of a black bear hunting season.

Admittedly without knowing the details of any such proposal, I would like to at least state my preference for a more, rather than less, restrictive season for such hunting, to relieve pressure on these animals, sometimes lost sight of with all the emphasis placed on grizzlies.

Very truly yours,
Ed Prach

#81

Wildlife Division
MT Dept. of Fish, Wildlife, and Parks
P.O. Box 20071
Helena, MT 59620-0701

December 3, 1993

Dear Sirs:

We appreciate the opportunity to comment on the State's Black Bear Management Plan and commend you for your work.

We agree with the majority of the steps outlined in Alternative #1, especially steps requiring bee-keepers to be more pro-active with fencing, the mandatory inspection and tagging of hides from harvested bears, the separation of black bear tags from resident combination licensee, the required use of meat, and better public education. A reduction in season lengths is definitely a step in the right direction, but we believe it does not go far enough in protecting the adult female segment of the population. Our research in the Cabinet Mountains and Yaak areas of Montana indicates that even with a spring season ending date of May 15, the mortality rate of bears associated with hunting is excessive (see enclosed draft).

Although black bear reproductive biology was discussed in the EIS, we believe its importance can't be over-emphasized. Our research and that of others in Montana indicates that black bear reproductive rates are not significantly different from that of grizzly bears, which are often viewed as the epitome of a slow reproducing species. Ironically, female white-tailed deer are currently offered greater protection from hunters than are female black bears due to shorter season lengths. A better understanding of black bear reproduction is necessary before harvest data can be adequately interpreted.

The document mentions the importance of gathering sex and age data from harvested bears and their use in assessing population health. For instance, median ages above 6.5 years for females and 4.5 years for males is assumed to be indicative of a healthy population. While this may often be true, elevated ages may just as well be indicative of poor recruitment of the younger age classes. For example, the median age of females harvested in Region 5 for 1985-1991 are the highest in the state, averaging 6.5 years or greater 4 out of 7 years (p.102 Table 3). However, this population has also been identified as being overharvested and was placed under a quota system in 1987 for that reason. Using another example, huckleberry production was extremely poor in northwest Montana in 1992. As a result, cub production was almost nonexistant in 1993, a year when we expected a birth pulse. In 1995 and 1996 when this cohort would normally become most vulnerable to hunting, 2 and 3 year-old bears will be largely absent from the harvest sample. The median age of bears killed will increase considerably, and there will be the illusion the new management plan is working. In reality, the population will have most likely declined. Miller (1990), Garshelis (1990), and Caughley (1974) also warn of relying too heavily on harvest data in assessing population status.

Another parameter that is monitored is the sex ratio of the harvest sample. It is assumed that the sex ratio at birth is 50:50, and that a preponderance of males in the harvest sample indicates that females are being protected. Our research in northwest Montana indicates that the sex of cubs at birth may be skewed toward males, to the point that the harvest sample may be indicative of the sex ratio at birth. Fifteen of 21 cubs we examined in the den with their mothers were male and only 6 were female (P = 0.08). While it may be argued that our data only approaches statistical significance, other researchers have reported similar results. Insufficient sample sizes have thus far prevented any firm conclusions on this question. It would be interesting to review records from the Animal Shelter in Helena and examine the sex ratio of orphaned cubs. Also, our data indicates there are higher levels of illegal and unreported mortality among females than males. It is important that these factors be considered when determining acceptable levels of mortality. In the interim, we support Beecham's recommendation (p. 24) that the harvest of females does not exceed 35% rather than the Draft's recommendation of 40%.

On page 22 the document lists rationale for a September 15 opening of the fall season. Peak vulnerability of adult and subadult females are given as reasons. The subadult female harvest in Region 1 is given as an example. Review of Figures 9 and 11 on pages 89 and 90 in actuality offer contrary evidence. State and Region 1 mortality of adult females is shown to peak in late May. Even early May adult female mortality is greater than early September. Although Region 1 subadult female mortality peaks in early September, we do not understand why this fact should dictate statewide management. Statewide subadult female mortality is higher in early and late May than in early September.

Page 16, Element "A" states the rationale for continuing spring and fall hunting seasons was to keep black bear populations wary; to minimize the incidence of bear depredations; and to minimize human/bear conflicts. These sentiments are repeated on p. 57. No evidence is presented on the level of conflicts currently occurring, and no evidence is given on the level depredations would be expected to increase in the absence of a spring hunting season. Information addressing this rationale needs to be presented and discussed. The depredations referred to on p. 19 occurred primarily during August and September and usually involved either bees or sheep.

Total research on black bears in Montana to date has been rather disjointed and usually in conjunction with other studies. We believe the state needs to take a more aggressive approach to black bear research, especially in some of the more isolated habitats east of the Continental Divide which aren't even mentioned in the EIS. Greater emphasis needs to be placed on the viability of some of these populations and their use of drier habitats. A biologist should be assigned full-time to conduct and coordinate black bear research, similar to what is currently being done for deer and elk.

The reintroduction of orphaned cubs is addressed in the document and we endorse the concept. We have assisted in the successful reintroduction of 2 young black bears in the past and will happily assist with more in the future. But practically speaking, it is very expensive for MDFWP to transport young bears from Helena to the Yaak area. Also, their genetic contribution to the population is minimal at best. We encourage a more active program where most of the orphaned cubs are placed east of the Continental Divide with some of the isolated black bear populations there. An ideal graduate study or series of studies could be arranged that would examine the success of this program.

Noticeably lacking in the document was any discussion of habitat. We believe the state can and should take a more active role in working with other agencies in the protection of wildlife habitat. In the case of bears, a more aggressive approach to road management, especially during the spring hunting season, would be most helpful.

Another aspect of spring hunting and roads that must be addressed is the hunting of bears from vehicles. It is not at all uncommon to see hunters slowly driving on Forest Service roads with the barrels of loaded guns protruding from the vehicle's windows. This activity is apparently legal since Forest Service roads are not considered public highways. Not only are the ethics of this type of "hunting" highly questionable, it leaves a very poor impression of hunters on many members of the public. Also, shots tend to be quick and the chances of killing a female with cubs, wounding a bear, or mistakenly killing a grizzly are greatly increased. The State of Montana needs to reassess its policy on carrying loaded weapons in vehicles not just for bears and other wildlife, but for human safety as well. 81-1

Page 42 of the Draft EIS states that Thier (1990) reported a black bear density of 0.06 bears/mi.^{2} and that Jonkel and Cowan (1971) reported a density of 0.38 bears/mi.^{2}. These figures are incorrect. In my thesis I reported 1 black bear/15.4 km^2 (0.17 bears/mi.^{2}) and Jonkel and Cowan reported 1 black bear/1.0-1.7 mi.^{2} (0.59-0.8 bears/mi.^{2}). In our more recent research in the Yaak area where remote-sensitive cameras were used to derive a more reliable density estimate, an estimate of 1 black bear/10.4 km^2 was obtained (0.25 bears/mi.^{2}; 1991 Annual Report). 81-2

In conclusion, we would like to reiterate that we believe MDFWP is moving in the right direction with this EIS and applaud you for your efforts. At the same time, we would like to emphasize the need to more conservatively manage the harvest of adult females, and to

stress the need for additional, long-term research on black bear reproduction and survival. Further, we recommend closing the spring hunting season in at least several hunting districts on a trial basis. Preferably these would be hunting districts for which baseline information currently exists. These areas would be monitored for increases in population numbers and/or depredation complaints.

Sincerely,

Tim Thier Wayne Kasworm

Tim Thier and Wayne Kasworm

475 Fish Hatchery Rd.
Libby, MT 59923
ph. 293-4162

LITERATURE CITED:

Caughley, G. 1974. Interpretation of age ratios. J. Wildl. Manage. 38:557-562.

Garshelis, D. L. 1990. Monitoring effects of harvest on black bear populations in North America: a review and evaluation of techniques. East. Workshop Black Bear Res. and Manage. 10:120-144.

Miller, S. D. 1990. Population Management of bears in North America. Int. Conf. Bear Res. and Manage. 8:357-373.

#82

Called
Jul 93

RICK RAMLER
540 MOCKINGBIRD RD
BELGRADE MT 59714

I'D LIKE TO SEE SPRING BEAR SEASON REMAIN OPEN AND UNCHANGED. I ALSO FEEL RESPONSIBLITY FOR DISTINGUISHING BETWEEN BLACK AND GRIZZLY BEARS IS THE HUNTERS AND I FEEL THAT THEY HAVE SHOW THEY ARE ABLE TO DO THAT.

#83

1054 Breckenridge
Helena, MT 59601
December 7, 1993

Mr. Don Childress
Wildlife Division
Montana Dept of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dear Mr. Childress:

The purpose of this lettsr is to express my opinions concerning the management of black bear populations.

I have been employed at the FWP Wild Animal Shelter in Helena for the past nine summers. While working there I have cared for over 100 black bear cubs. Most of these cubs have been orphans of the spring black bear hunt. We operate the shelter on a very tight budget. I believe the budget is supposed to cover the time from Memorial Day through Labor Day each year. We often begin receiving bear cubs in April and feed them until the cold weather sets in, usually in November. Since we don't have enough money to pay employees out of the three month period, many of our hours are donated to care for the bears and other species that remain at the shelter before June and after August.

I believe the best solution would be to eliminate the spring black bear hunt. My position is not one of an anti-hunter. Although I do not hunt, I understand the need for managing the game animals of Montana. If this solution is not feasable I would endorse the ideas expressed in the Draft EIS under New Program Initiatives, item P. If the spring black bear hunt is continued, I believe that it is reasonable to ask that sportsman dollars be directed to the staffing and upgrading of the shelter in order that we can care for orphaned cubs and prepare them to be released during the winter months.

I appreciate your efforts in trying to find a solution to this contraversial issue.

Sincerely,

Marilyn Hayes

Marilyn Hayes

#84

MILLIE CARSON
POB 548
RED LODGE MT 59068

DECEMBER 7, 1993

I THINK IT IS A GOOD IDEA TO SHORTEN THE SEASON. ELIMINATE SPRING SEASON. ANY IDEAS OF HOW TO BAN THE SPRING SEASON? YOUR CATERING TO THE GOOD OLE BOYS.

#85

THE FUND FOR ANIMALS INC.

DEC 13

850 SLIGO AVENUE, SUITE 300, SILVER SPRING, MD 20910
Telephone: (301) 585-2591
FAX: (301) 585-2595

Cleveland Amory
President

Wayne Pacelle
National Director

December 7, 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

To Whom It May Concern:

On behalf of the 1,000 Montana members of The Fund for Animals, a New York-headquartered national animal protection organization, I submit the following comments on the November 1993 Draft Environmental Impact Statement concerning "Management of Black Bears in Montana." The Fund for Animals appreciates the opportunity to comment and appreciates all the hard work that was invested in formulating this Draft EIS.

The Fund for Animals applauds the Department of Fish, Wildlife and Parks for taking a stand against the hunting of black bears with hound or with bait. We are, however, dissatisfied with the agency's continuing tolerance for spring black bear hunting and for black bear hunting in grizzly-occupied habitat. While we would like to see the agency halt all trophy hunting of black bears, we certainly believe that existing law and social attitudes should lead the agency to reject spring hunting and black bear hunting in grizzly-occupied areas.

Bait, Hound Hunting of Bears Socially and Biologically Unacceptable

The Department of Fish, Wildlife and Parks has cogently stated the case against hound and bait hunting in the Draft EIS. These unsporting, cruel, and biologically reckless hunting practices should remain illegal in Montana. Baiting and hound hunting are not permitted for deer, elk, or pronghorn hunting. The same standards should apply for the killing of bears. We endorse the agency's views on this important facet of bear management.

Reputable public attitude surveys have been conducted in six western states within the past 5 years. Each of these surveys indicates overwhelming public opposition to bait and hound hunting. The public -- including most true sportsmen -- simply considers these methods to be unfair. There is little support for shooting

a bear with his head in a barrel of food or shooting a bear off a tree branch at point-blank range.

The Department of Fish, Wildlife and Parks also correctly pointed out that the use of these hunting methods may violate the Endangered Species Act prohibitions on the "taking" of grizzly bears.

Spring Hunting Places Lactating Females and Their Cubs At Risk

While The Fund support the Department of Fish, Wildlife and Parks on its decision to oppose baiting and hounding, we oppose the agency's decision to support a spring black bear hunting season. The Montana Department of Fish, Wildlife and Parks concedes that hunters kill a substantial number of lactating female bears each spring. The killing of lactating females is virtually guaranteed by a spring season that runs from late May to mid-June. By June, virtually all lactating female bears have emerged from their dens and are thereby vulnerable to shooting mortality. If a lactating female is shot, her cubs are doomed to die from starvation, predation, or accident. The cubs do not have a reasonable chance of surviving on their own until September 1.

Given this information and a history of hunters shooting lactating females in Montana, the state must rethink its sanctioning of the spring hunting of black bears, in order to protect females with lactating cubs.

In some states, wildlife professionals have expressed concern over spring hunting. In New Mexico, biologists from the Department of Fish and Game became so concerned about the biological impact of spring bear hunting that they recommended in 1991 a termination of the season. The Fish and Game Commission accepted the recommendation, banning the season.

Internationally known bear researcher Charles Jonkel argues that spring is the "toughest time of the year for bears" (Ursid Research Center, Report No. 81). He points out:

--"they are concentrated on extremely small spring ranges, and therefore are very vulnerable."

--"many of the bears are in poor condition after the long winter sleep, and need time and security for feeding."

--"their breeding season and cub-rearing season is then."

With a fall hunting season option, it seems biologically reckless to permit spring bear hunting, since bears are highly vulnerable and in weakened condition and since entire family groups are at risk.

Recycled Paper

There are also social reasons why spring hunting should be discontinued. Within the last two years, spring black bear hunting has been outlawed in two Western states, Utah and Colorado, because of overriding public sentiment against the practice. In Utah, the state's Wildlife Board, citing public opinion and a need to jettison unethical hunting practices, ended its spring black bear hunting season.

In Colorado, the Wildlife Commission discounted significant public opposition to spring bear hunting and voted to continue its season. In response, a coalition of more than 40 organizations, led by The Fund for Animals, succeeded in gathering 80,000 signatures and had a measure placed on the November 3, 1992 general election ballot that would ban not only spring bear hunting, but also any use of bait and hounds to hunt bears. In spite of unanimous opposition from the seven-member Wildlife Commission, the National Rifle Association, and 20 other hunting organizations, the measure passed by an overwhelming margin, receiving 70 percent of the vote or well more than a million votes out of 1.5 million cast in the state. The measure won not only in the urban counties of Boulder, Denver, and El Paso, but in counties throughout the state. In fact, Amendment 10, as it was officially labeled by the Secretary of State, received a majority of votes in 45 of 63 Colorado counties.

To put the Colorado vote in perspective it is important to note how difficult it is to win ballot measures. In Colorado, more than 50 organizations attempted to secure enough valid signatures to place a measure on the November ballot; only 10 succeeded. Of the 10 citizen-initiated measures, only four passed. Of the four that passed, only one--the bear initiative--gained more than 60 percent of the vote. In fact, the bear measure received more votes than did President Bill Clinton and Senator Ben Nighthorse Campbell in Colorado.

As in Montana, deer, elk, and pronghorn in Colorado are not shot during their young-rearing season. The public did not see any legitimate reason for applying a different standard for bears than for other big-game animals.

Today, only six states--out of 28 states that permit black bear hunting--sanction a spring season: Alaska, Arizona, Idaho, Oregon, Montana, and Idaho. In Arizona, it is a severely limited season, and only one hunter succeeded in killing a bear during Arizona's spring season. Thus, for all practical purposes, only five states have spring seasons. Montana should discontinue its season, and return to the mainstream of black bear management in America.

Spring Black Bear Hunting May Lead to Mistaken Identity for Bears

The state of Montana knows that The Fund for Animals has an

abiding interest in protecting grizzly bears (Ursus arctos horribilis) from shooting. In 1991, we succeeded in gaining a U.S. District Court order to close down Montana's grizzly bear hunts.

Short of an open season on them, grizzly bears face their most significant threat of human-caused mortality from black bear hunters, who often mistake grizzly bears for black bears. To avert the future killing of grizzly bears to black bear hunters, the state should immediately close all grizzly-occupied habitat in Montana to black bear hunting, in spring and fall. This would include all areas in the Northern Continental Divide Ecosystem (NCDE), the Montana portion of the Greater Yellowstone Ecosystem (GYE), and the Montana portion of the Cabinet-Yaak Ecosystem. Already, within the NCDE, black bear hunting is closed in Glacier National Park. And within the GYE, black bear hunting in Montana is already closed in Yellowstone National Park.

Within the Draft EIS, the authors repeatedly stated that black bear hunting in grizzly-occupied habitat has no biological impact. This statement is made without support. What's more, in recent years, human-caused bear mortality has been extremely high, approaching the 14-bear quota of human-caused mortality. 85-1

What's more, the Endangered Species Act does not allow for a modest take of grizzly bear through incidental shooting during the black bear hunting season. Any shootings of grizzlies caused as a consequence of mistaken identity represent violations of the ESA and should be considered excessive.

That the grizzly bear can be mistaken for a black bear is well known. In a 1991 letter, Francis E. Petera, the director of the Wyoming Game and Fish Department, referred to a hunter-killed grizzly bear that "was mistakenly identified as a black bear even by federal and state agency personnel."

Minutes from a 22 April 1992 meeting of the Yellowstone Ecosystem Managers' Subcommittee refers to the need for "a training video for the Grizzly Bear Reporting Task Force to use in educating staff about bear identification . . . to train observers in distinguishing black and grizzly bears."

During 1985 and 1986, Wayne Kasworm of the Montana Department of Fish, Wildlife, and Parks gave a bear identification test to hunters and nonhunters in northwest Montana. Groups of people were shown 17 pictures of bears and were asked: (1) What species of bear is in the picture? and (2) If you were a black bear hunter in an area with a closed season on grizzly bear, would you shoot this animal? The first question was answered by 408 respondents with an average of 4.9 misidentifications of the 17 pictures -- or 29 percent. The second question was answered by 178 respondents with an average of 1.7 illegally killed grizzly bears -- or 10 percent.

#85 continued

Writing in Montana Outdoors, Mr. Kasworm made the following suggestions for distinguishing the two species:

> "Black and grizzly bear identification is based on several physical characteristics. Despite the names 'black' and 'grizzly,' coat color is the least reliable characteristic, since not all black bears are black and not all grizzly bears are 'grizzled.' Black bears can be blond, cinnamon, dark brown, or black; grizzly bears can be light-colored, many shades of brown, and occasionally even black. Not all grizzly bears have the silver-tipped guard hairs that give the animal a frosted or grizzled appearance, and hence the name 'grizzly.'
>
> "Like color, size is variable and not a good identifying characteristic. Most people overestimate the size of grizzlies. In Montana, typical adult female grizzly bears weigh 200-350 pounds and typical adult males weigh 300-550 pounds. An adult male black bear can easily weigh as much as or more than a female grizzly.
>
> "Grizzly bears have well-developed muscles in the shoulders, and often appear to have a shoulder hump; black bears lack a prominent shoulder hump.
>
> "Grizzlies have long, gently curved claws adapted for digging. Black bears have shorter, more sharply curved claws, which are better adapted for climbing trees and tearing logs apart.
>
> "The grizzly has a concave or 'dish-shaped' face in profile, while the profile of the black bear is fairly straight from forehead to nose. The concave shape of the grizzly bear's profile makes the face appear broader than that of the black bear.
>
> "Ear position and shape is one of the better identifying characteristics. The black bear's ears tend to be larger, more erect, and more pointed than those of the grizzly, whose ears tend to be smaller and more rounded.
>
> "It is important to remember that all of the above characteristics can vary with sex and age of the individual. Proper filed identification should involve careful scrutiny of several characteristics."

In photographs accompanying the article, Mr. Kasworm illustrated the difficulty of properly identifying a bear. To identify one photograph of a yearling grizzly, one must look at "the long claws on the forelegs." In another photograph, a black bear "appears to have a shoulder hump because of the body and head position."

The similar appearance of the two species of bears and the threat that this similarity poses for the grizzly is well known to state wildlife agencies. In an effort to educate big game hunters in 1991, the Montana Department of Fish, Wildlife and Parks issued

a detailed press release. As the release stated, "Grizzlies and black bears can be confused if one is not familiar with the distinguishing characteristics of each species. Even then, however, **some are difficult for all but the most knowledgeable and experienced outdoorsmen to distinguish, and a few, at as little as 30 yards, can fool even the experts.**" (Emphasis added). More than 10 paragraphs follow in an attempt to prepare the hunter for shooting black bears but not shooting grizzlies. "Weather, light, background color, distance from the animal, experience, level of excitement -- all influence one's observations," the release said. "Experienced bear hunters and biologists agree that there can be overlap in the appearance of grizzly and black bears, and much variability within individuals of each species."

The Wyoming Game and Fish Commission, in its Trophy Game Regulations, provides small illustrations suggesting that hunters look at the bear profile, face, and front track to distinguish between the grizzlies and black bears.

With proper identification resting on such small characteristics as the shape of the ears, head profile, claws on the forelegs, and tracks, it is easy to understand why hunters, biologists and enforcement officials have difficulty distinguishing between the species.

A RECORD OF MISTAKEN-IDENTITY KILLINGS OF GRIZZLIES

Data compiled by state agencies indicates numerous mistaken-identity killings of grizzly bears. The Fund for Animals doubts that mistaken-identity killings have always been systematically recorded. For this reason, we have listed both the reported mistaken-identity killings, and other grizzly killings that could have been cases of mistaken identity by black bear hunters.

In addition, we believe that hunter reports of mistaken-identity grizzly killings are under-reported for two reasons: (1) the fear of prosecution for killing a federally protected species; and (2) the concern that other hunting and baiting will be restricted if grizzly killings, even mistaken-identity shootings, become known to federal officials.

NORTHERN CONTINENTAL DIVIDE ECOSYSTEM
(Recovery Plan Puts Total Grizzly Population at 391 Minimum)

5/18/80 -- Grizzly bear, male, Deerlodge National Forest, mistaken for black bear. N80-3.

5/30/80 -- Grizzly bear, female, Flathead National Forest, mistaken for black bear. Had 2 cubs. N80-4.

11/3/80 -- Grizzly bear, male, at Monture Creek, mistaken identification. N80-24.

8/24/81 -- Grizzly bear, male, at Seeley Lake, shot out of season, thought black bear marauding. N81-2.

9/21/81 -- Grizzly bear, male, at Poison Oak, shot over bait and snare, poaching. N81-5.
9/26/81 -- Grizzly bear, male, Flathead National Forest, mistaken for black bear. N81-6.
5/08/82 -- Grizzly bear, male, Flathead National Forest, mistaken for black bear. N82-3.
5/07/83 -- Grizzly bear, female, on Montana private land, mistaken for black bear. N83-1.
5/12/83 -- Grizzly bear, female, Flathead National Forest, mistaken for black bear. N83-2.
5/18/83 -- Grizzly bear, male, Flathead National Forest, mistaken for black bear. N83-4.
5/22/83 -- Grizzly bear, male, Flathead National Forest, mistaken for black bear. N83-5.
5/27/85 -- Grizzly bear, male, on Montana private land, mistaken for black bear. N85-5.
9/26/88 -- Grizzly bear, male, Flathead National Forest, mistaken for black bear. N88-5.
9/28/88 -- Grizzly bear, female, Flathead National Forest, mistaken for black bear. N88-6.
5/15/89 -- Grizzly bear, male, Flathead National Forest, mistaken for black bear. 89NC-2.

Other Human-Caused Mortalities Of Grizzlies

10/15/81 -- Grizzly bear, male, head of Dearborn RW, illegally shot while hunting in camp. N81-9B.
6/13/82 -- Grizzly bear, male, Whale Creek, illegally shot and left, claws gone, poaching. N82-4.
10/24/82 -- Grizzly bear, male, Flathead National Forest, illegally shot, no hunter tag, poaching. N82-11.
9/15/84 -- Grizzly bear, male, Blackfoot Indian Reservation, determined illegal deliberate. N84-4.
9/22/84 -- Grizzly bear, female, five miles out of Choteau, determined illegal deliberate, poaching. N84-6.
10/21/84 -- Grizzly bear, male, Nyack Flats, illegally shot by hunter day after season, poaching. N84-18.
10/20/85 -- Grizzly bear, female, Milldred Moran's woods, shot by bird hunter, claim of self-defense. N85-14.
10/20/85 -- Grizzly bear, male, Milldred Moran's woods, shot by bird hunter, claim of self-defense. N85-15.
March-April 1986 -- Grizzly bear, female, Flathead Indian Reservation, determined illegal, possibly people involved.
March-April 1986 -- Grizzly bear, female, Flathead Indian Reservation, determined illegal, possibly people involved.
June 1986 -- Grizzly bear, female, Two Medicine River, determined illegal, collar found with bullet hole.
6/23/86 -- Grizzly bear, male, Flathead National Forest, determined illegal, collar found cut off.
10/11/86 -- Grizzly bear, male, Blackleaf Game Range, possible illegal, bullet wound.
Fall 1986 -- Grizzly bear, female, Shoshone National Forest, determined illegal, collar found cut off.
10/1/87 -- Grizzly bear, female, Blackfoot Indian Reservation,

determined illegal, possibly people involved.
Fall 1987 -- Grizzly bear, male, Lewis and Clark National Forest, possibly illegal.
5/13/88 -- Grizzly bear, female, White River, determined illegal poacher kill, had two yearlings. N88-1.
5/25/89 -- Grizzly bear, male, Flathead National Forest, illegal poaching. 89NC-3.
July 1989 -- Grizzly bear, female, Blackfoot Indian Reservation, determined illegal, radio collar cut off. 89NC-5.
September 1989 -- Grizzly bear, male, Flathead National Forest, determined illegal, radio collar cut off. 89NC-8.
10/1/89 -- Grizzly bear, female, Flathead National Forest, determined illegal. 89NC-11.
6/5/90 -- Grizzly bear, male, Blackfoot Indian Reservation, bear shot after walking past private residence, poaching. N90-05.

GREATER YELLOWSTONE ECOSYSTEM
(Recovery Plan Puts Total Grizzly Population at 171 Minimum)

5/26/64 -- Grizzly bear, male, Shoshone National Forest, mistaken for black bear. Y64-02.
September 1973 -- Grizzly bear, male, Shoshone National Forest, thought to be mistaken for black bear, a very brown grizzly. Y73-11.
10/1/74 -- Grizzly bear, female, Bridger-Teton National Forest, thought to be mistaken identification. Y74-11.
10/1/74 -- Grizzly bear, cub of above female, killed in Bridger-Teton National Forest. Y74-12.
September 1976 -- Grizzly bear, male, RMP, WY, mistaken for black bear. Y76-05.
9/16/80 -- Grizzly bear, male, Bridger-Teton National Forest, mistaken for black bear. Y80-7.
9/23/81 -- Grizzly bear, male, Gallatin National Forest, mistaken for black bear. Y81-06.
5/29/82 -- Grizzly bear, male, Shoshone National Forest, shot over black bear bait. Y82-02.
6/09/82 -- Grizzly bear, male, Shoshone National Forest, shot over black bear bait. Y82-03.
6/09/82 -- Grizzly bear, female, Shoshone National Forest, shot over black bear bait. Y82-04.
6/09/82 -- Grizzly bear, male, Shoshone National Forest, shot over black bear bait. Y82-05.
5/31/85 -- Grizzly bear, female, Bridger-Teton National Forest, mistaken for black bear over bait. Y85-01.
9/10/85 -- Grizzly bear, male, Bridger-Teton National Forest, mistaken for black bear. Y85-13.
9/25/86 -- Grizzly bear, male, Gallatin National Forest, mistaken for black bear. Y86-06.

Other Human-Caused Mortalities Of Grizzlies

9/28/62 -- Grizzly bear, sex unknown, Gallatin National Forest, closed area, possibly people involved. Y62-12.
5/04/66 -- Grizzly bear, sex unknown, Yellowstone National Park, found wounded at dump and killed. Y66-02.

#85 Continued

10/29/66 -- Grizzly bear, male, Gallatin National Forest, determined illegal kill. Y66-11.
10/29/66 -- Grizzly bear, male, Gallatin National Forest, determined illegal kill. Y66-12.
Summer 1967 -- Grizzly bear, sex unknown, Shoshone National Forest, determined illegal kill, possibly people involved. Y67-06.
8/19/67 -- Grizzly bear, male, Gallatin National Forest, illegal kill, deliberate. Y67-12.
August 1967 -- Grizzly bear, sex unknown, Shoshone National Forest, determined illegal kill, possibly people involved. Y67-13.
August 1967 -- Grizzly bear, sex unknown, Shoshone National Forest, determined illegal kill, possibly people involved. Y67-14.
00/00/68 -- Grizzly bear, male, Shoshone National Forest, determined illegal kill. Y68-21.
7/12/69 -- Grizzly bear, female, report that a grizzly bear had been shot at Gallatin National Forest dump, skull retrieved. Y69-09.
5/19/70 -- Grizzly bear, male, Gallatin National Forest, determined illegal kill at dump. Y70-01.
9/15/70 -- Grizzly bear, male, Gallatin National Forest, illegal hunter, no trophy tag, buried specimen. Y70-41.
10/16/70 -- Grizzly bear, male, Bridger-Teton National Forest, determined illegal, possibly people involved. Y70-49.
10/21/70 -- Grizzly bear, male, Bridger-Teton National Forest, determined illegal, possibly people involved. Y70-50.
10/30/70 -- Grizzly bear, sex unknown, Targhee National Forest, determined illegal, foot and part of carcass found near campground. Y70-52.
8/16/71 -- Grizzly bear, female, Gallatin National Forest, determined illegal. Y71-19.
8/16/71 -- Grizzly bear, female, Gallatin National Forest, determined illegal. Y71-20.
8/5/71 -- Grizzly bear, female, Gallatin National Forest, poisoned and shot in stomach, head recovered. Y71-16.
9/00/71 -- Grizzly bear, sex unknown, private land in Idaho, determined illegal. Y71-30.
10/17/71 -- Grizzly bear, sex unknown, private land in Idaho, reported wounded to Conservation Officer. Y71-32.
10/26/71 -- Grizzly bear, male, Gallatin National Forest, determined illegal poacher kill. Y71-34.
9/15/72 -- Grizzly bear, female, Gallatin National Forest, cubs were nursing carcass, determined illegal. Y72-20.
9/15/72 -- Grizzly bear, cub, sex unknown, Gallatin National Forest, determined illegal. Y72-21.
9/29/72 -- Grizzly bear, female, Bridger-Teton National Forest, determined illegal. Y72-23.
1972 -- Grizzly bear, sex unknown, Targhee National Forest, possible illegal hunter. Y72-31.
August 1973 -- Grizzly bear, sex unknown, Targhee National Forest, recorded as hunter however Idaho did not have a hunting season. Y73-03.
September 1973 -- Grizzly bear, female, Gallatin National

Forest, with cubs, determined illegal. Y73-09.
1973 -- Grizzly bear, probably male, Bridger-Teton National Forest, illegal hunt conducted on ranch. Y73-18.
1973 -- Grizzly bear, probably male, Bridger-Teton National Forest, illegal hunt conducted on ranch. Y73-19.
9/16/74 -- Grizzly bear, male, Gallatin National Forest, illegal poacher kill. Y74-07.
October-November 1975 -- Grizzly bear, sex unknown, Gallatin National Forest, illegal poacher kill. Y75-03.
9/18/76 -- Grizzly bear, male, Gallatin National Forest, illegal kill, presume shot. Y76-03.
9/00/76 -- Grizzly bear, sex unknown, Gallatin National Forest, illegal poacher kill. Y76-06.
August 1977 -- Grizzly bear, female, Shoshone National Forest, determined illegal kill, poaching, had two cubs. Y77-07.
9/03/77 -- Grizzly bear, female, Shoshone National Forest, had two cubs, illegal poacher kill. Y77-09.
10/5/77 -- Grizzly bear, male, Shoshone National Forest, determined illegal. Y77-17.
10/15/77 -- Grizzly bear, male, private land in Idaho, determined illegal. Y77-19.
August 1978 -- Grizzly bear, male, Gallatin National Forest, illegal poacher kill. Y78-06.
August 1978 -- Grizzly bear, probably male, Gallatin National Forest, illegal poacher kill. Y78-08.
9/13/78 -- Grizzly bear, male, Gallatin National Forest, illegal poacher kill. Y78-09.
October 1979 -- Grizzly bear, female, Gallatin National Forest, bear shot by hunter, claimed self-defense. Y79-11.
9/15/80 -- Grizzly bear, female, Gallatin National Forest, illegal poacher kill. Y80-06.
5/14/81 -- Grizzly bear, male, Shoshone National Forest, determined illegal. Y81-01.
Summer 1981 -- Grizzly bear, sex unknown, Targhee National Forest, determined illegal, possibly people involve, claws seen by reliable person. Y81-04.
9/13/81 -- Grizzly bear, female, Gallatin National Forest, shot by grouse hunter, claim of self-defense. Y81-05.
9/30/81 -- Grizzly bear, male, Gallatin National Forest, illegal shot in rear on moose carcass. Y81-07.
September 1981 -- Grizzly bear, sex unknown, Targhee National Forest, determined illegally shot by truck driver. Y81-08.
September 1981 -- Grizzly bear, male, Bridger-Teton National Forest, illegal kill by nonresident hunter. Y81-09.
10/8/81 -- Grizzly bear, male, Shoshone National Forest, illegal shot in throat and stomach over elk gut pile. Y81-10.
10/16/81 -- Grizzly bear, female, Gallatin National Forest, illegal probably shot. Y81-11.
10/00/81 -- Grizzly bear, male, Bridger-Teton National Forest, illegally shot. Y81-12.
September 1982 -- Grizzly bear, female, Targhee National Forest, shot by hunter when charged, had 2 yearlings. Y82-13.

10/10/82 -- Grizzly bear, sex unknown, Bridger-Teton National Forest, illegally shot near dead horse. Y82-14.
10/17/82 -- Grizzly bear, male, Bridger-Teton National Forest, illegally shot, feet missing. Y82-16.
September 1984 -- Grizzly bear, female, Gallatin National Forest, determined illegal. Y84-08.
10/16/84 -- Grizzly bear, male, Targhee National Forest, illegally shot. Y84-09.
11/11/84 -- Grizzly bear, female, Targhee National Forest, illegally shot, died in winter den, two cubs. Y84-11.
8/15/85 -- Grizzly bear, female, Bridger-Teton National Forest, illegally shot. Y85-11.
Fall 1986 -- Grizzly bear, female, Shoshone National Forest, determined illegal. Y86-11.
10/24/87 -- Grizzly bear, female, Bridger-Teton National Forest, possible illegal. Y87-03.
10/11/88 -- Grizzly bear, male, Bridger-Teton National Forest, illegal hunter kill.
Spring 1989 -- Grizzly bear, male, Gallatin National Forest, illegally shot. 89Y-1.
9/12/90 -- Grizzly bear, female, Bridger-Teton National Forest, illegal hunter kill, claim of self-defense.
9/14/90 -- Grizzly bear, male, Bridger-Teton National Forest, illegal hunter kill, claim of self-defense.
9/15/90 -- Grizzly bear, female, Gallatin National Forest, illegal hunter kill.
9/22/90 -- Grizzly bear, female, Bridger-Teton National Forest, determined illegal, collar cut off.
10/9/90 -- Grizzly bear, female, Shoshone National Forest, illegal hunter kill, claim of self-defense.
10/10/91 -- Grizzly bear, sex unknown, Grouse Mountain, elk hunter shot and hit grizzly in self-defense.

CABINET-YAAK ECOSYSTEM
(Recovery Plan Puts Total Grizzly Population at 15-20 Minimum)

1972 -- Grizzly bear, subadult, killed at Rock Creek, Cabinet-Yaak area, mistaken for black bear.

Other Human-Caused Mortalities Of Grizzlies

October 1987 -- Grizzly bear, female cub, killed at Flattail Creek, KNF, mistaken for elk, hunter acquitted.

The CYE population of grizzly bears is so small that the death of even one grizzly bear can be disastrous to the recovery effort. The Grizzly Bear Recovery Plan states that "management should strive to prevent all human-caused mortality" in these ecosystems. Protection for the black bear in these ecosystems would be a wise step toward this goal.

From 1983 to 1987, Mr. Kasworm and Steven T. Knick of the Idaho Department of Fish and Game, studied grizzly bear populations in the Selkirk Mountains and in the Cabinet-Yaak Mountains and published "Shooting Mortality In Small Populations of Grizzly

Bears." They noted that of 19 grizzly bears radio-collared by them, at least five were shot, one in defense of human life. Another was believed to have been killed by hunters. All except one of the shootings occurred during a hunting season. And a grizzly cub, not radio-collared, was mistaken for an elk and was shot and killed. They call such low survival "alarming" and suggest that shooting mortality "is of primary and immediate concern for the recovery of these populations." They did not state that these illegal shootings of grizzly bears were cases of mistaken identity, but their study illustrates the threat that hunters pose for grizzlies.

Because the populations of grizzlies are larger in the Northern Continental Divide and Yellowstone Ecosystems, the Recovery Plan notes that some human-caused mortalities can be sustained. However, fewer human-caused mortalities "would likely result in population increase." Since recovery is the goal, human-caused mortality should be reduced as much as possible. Protecting the black bear in grizzly habitat would inevitably lead to increases in the grizzly populations.

Numerous human-caused grizzly mortalities occur on National Forests, and the risk that black bear hunters pose to grizzly bears is well known to the United States Forest Service.

On April 4, 1989, Forest Supervisor Barry Davis, Shoshone National Forest, wrote to Ron Starkey, USFS, refers to "a concern by some Shoshone National Forest and local Wyoming Game and Fish personnel about the possibility of grizzly bear mortalities" resulting from "large open areas from last years fires with early green-up and high visibility; grizzlies rubbing on blackened trees and appearing more like black bears; a known concentration of denning grizzlies in the North Fork Shoshone River and adjacent areas; a possibility of grizzly bears being concentrated in these areas in spring and early summer and a probability of increased hunting pressure by the outfitted and non-outfitted hunting public."

On Jan. 17, 1992, Forest Supervisor Joel D. Holtrop, Flathead National Forest, sent Jasper Carlton, of the Biodiversity Legal Foundation, a Decision Notice and Finding of No Significant Impact for a timber sale at Flathead National Forest which stated at page IV-35: "Although all seasonal habitat are important to grizzly bears, the spring habitats are probably most important. This is due to the fact that only low elevation habitats are available to them during the post denning period for foraging. This increases the probability of coming into contact with humans, which creates a risk of mortality for the grizzly bear. This is particularly true when considering that the spring black bear season encourages hunters to seek out bears. This situation creates a need to insure that grizzly bears are provided security during other seasons also, however, they are not as environmentally restricted to any

#85 continued

particular elevation zone during summer and fall as they are during the spring."

In a November 1991 Draft EIS for another Flathead National Forest timber sale it was stated at page IV-24: "Based on the prediction that bears use the Flat Creek basin primarily as a spring range, and the fact that spring black bear hunting draws people with firearms into the area, this new road would provide easier access by humans into a grizzly bear high probability use area, increasing the risk of mortality." And at page IV-26: "With the availability of road 2851 to motorized use to the South Creek trailhead and the availability of the other roads to nonmotorized use for spring black bear season, the risk of mortality to the grizzly bear would be higher than it is currently." And at page IV-32: " . . . additional heavy timber harvesting that also requires almost six new miles of road increases the risk of mortality exponentially, especially during the spring black bear hunting season."

In the Flathead National Forest Endangered and Threatened Species Biological Assessment for the Lost Silver Timber Sale at page 5: "These actions will reduce potential grizzly bear mortality risks associated with spring and fall bear hunting."

In the Flathead National Forest Biological Assessment for the Red White Pine Timber Sale at page 12: "During the past 19 years, the major cause of mortality to grizzly bears in the project area have been illegal shootings (by hunters). Three grizzlies have been illegally killed in the project area since 1972; in the spring of 1978 one was killed in McGinnis Creek drainage, in the fall of 1981 one was killed in the Kimmerly Creek drainage, and in the spring of 1989 one was killed in Canyon Creek (MDFWP data)."

In the Flathead National Forest Jim Fatty Draft Environmental Impact Statement at page 14: "Road impacts have been the result of at least one grizzly bear mortality in the Cedar Creek-Fatty Creek area where a grizzly was illegally shot to death near a road in May of 1988." And: "Mortality risks are recognized during the spring black bear season and during the general big game hunting season."

The information presented above demonstrates that to sanction black bear hunting in grizzly-occupied habitat is, for all practical purposes, to sanction grizzly bear hunting. To protect this federally threatened species, the state has a duty to act and halt these preventable tragedies.

Summary

Public attitudes are rapidly changing. People want to see wildlife better protected. That is evident by the dramatic changes in black bear management sweeping through western states. In fact, yet another ballot initiative -- in Oregon, in this case -- has

been launched in a western state to protect bears. Common citizens do not want to see abusive bear hunting practices sanctioned by state wildlife agencies.

In the Draft EIS, it is unfortunate that the Department of Fish, Wildlife and Parks has chosen to accept the status quo, rather than to take the lead in formulating a truly progressive bear management plan. The continuing tolerance for a spring bear hunting season is disappointing to say the least. And the absence of even an alternative that calls for the end of black bear hunting in grizzly-occupied habitat suggests that the agency is not willing to confront the tough issues. 85-2

There is no compelling biological reason to hunt black bears in spring and in grizzly-occupied habitat. Hunters still would have an opportunity to kill bears, in the habitat that is uninhabited by grizzlies and in the fall, when cubs are no longer entirely dependent on their mothers for survival.

I urge the Commission to outlaw spring black bear hunting and any black bear hunting in grizzly-occupied habitat. We sincerely hope that this issue need not be elevated to the state legislature or to the voters of Montana.

Thank you for your attention to this important matter. If you have any questions, please do not hesitate to contact us.

Sincerely yours,

Wayne Pacelle

Wayne Pacelle
National Director

#86

John Wildish
P.O. Box 355
Clancy, MT 59634

Stopped in the office 12/7/93 just to find out more about the black bear DEIS. He offered the following comments:

- Would hate to see the spring season ~~close~~ lost — use of the quota would be an alternative. But I don't want the bear populations jeopardized. I enjoy getting out to hunt that time of year.
- It would be nice to have some archery-only areas, where archers would not have to wear hunter orange or worry about getting shot.

Sent him a copy of DEIS on 12/8

Greater Yellowstone Coalition

#87

December 7, 1993

Mr. Don Childress, Administrator
Wildlife Division
Montana Department of Fish, Wildlife, and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dear Mr. Childress:

Thank you for sending us the Montana Dept. of Fish, Wildlife, and Parks (MDFWP) Draft Environmental Impact Statement (DEIS) on the management of black bear populations in Montana. We support hunting in Montana, and much of our work on habitat and species conservation results in improved hunter opportunities, yet we only support hunting to the extent it is consistent with maintaining viable and healthy wildlife populations. Because of many unanswered questions regarding the status and trends of black bear habitat and populations, and because of some indications that black bear populations in Montana may be in decline (see Figures 1 and 2, Appendix 2: Hunter Success vs. Hunter Effort), we are opposed to a number of elements in the preferred alternative. We have organized our comments into various categories that follow.

Status and Trends of Black Bear Habitat and Populations in Montana vs. Proposed Hunting Targets

We have concerns that MDFWP is issuing black bear hunting permits at all, given the steadily increasing pressure on their habitat, and the limited information on trends of either black bear habitat or populations.

We are concerned that the hunting targets contained in Element M are not adequate to ensure that black bears will not be killed at excessive levels. Whereas the targets "a)" (no more than 40% of the bears killed be females) and "b)" (sets median age minimums of male (4.5) and female (6.5) bears killed) have some basis in the scientific literature, it is inappropriate to compare them to annual sampling sizes. Bear mortalities fluctuate significantly year-to-year due to changing environmental conditions and other factors. Because one year in three may be consistent with targets a) and b) is no guarantee that there is not a problem with the level of mortality. Instead, to ensure an adequate sampling size, the percentage of females killed and median ages of males and females should be determined using data totalled from three consecutive years, and then compared to the targets. In addition, Provision C must be reworded so that based on the above method, if harvest composition does not comply with a) or b) (not "and"), management changes will be made accordingly (not, "all data... will be considered to determine if management changes are necessary." These two criteria are the best indicators of whether or not

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the mortality rate is excessive, and it is not clear what additional data should be referred to according to the current wording.

One additional criterion, also well-supported in the scientific literature, and which we understand was deleted from an earlier draft, is that no greater than 10% of the estimated population should be harvested. We realize that MDFWP does not have black bear population estimates in many areas of the state, yet these areas should be identified for further research, and certainly this target should apply in all areas where sufficient data is available.

We appreciate the intent to acquire better information on the status and trends of black bear populations and habitat in Montana, contained in Elements H, N, Q, Y, Z, III, and IV (although Element Y should be rewritten--habitat criteria must first be developed by biologists; then reviewed by corporate and other land management entities). Nonetheless, we believe more can and should be done to protect black bear populations from excessive mortality which could be a problem at the current high levels of kills, especially where data is deficient.

We recognize the difficulty in acquiring this data, yet this is all the more reason to set conservative hunting quotas. In areas where data is insufficient, MDFWP should put a moratorium on the hunt until it can justify that the hunt is well within the limits of a sustainable take of the population, including consideration of habitat trends and other sources of bear mortality. We urge that the hunting target and habitat criteria reviews proposed in Elements III and IV be implemented immediately for this purpose. Only then can MDFWP assure compliance with the mission statement described at the opening of the DEIS: to ensure healthy, viable black bear populations in Montana.

To ensure that any proposed targets or quotas are meaningful, we support the annual monitoring reports proposed in Element Z. Where targets are not being met, as is already the case according to the DEIS (pp. 24-5), immediate remedies must be implemented.

We support Element C, that ADC kills count toward the hunting quotas, since not to include these would make no biological sense.

Spring hunting of Black Bears

We are opposed to the hunting of black bears in spring, because the bears are weakened and particularly vulnerable in spring, and there is particular risk that lactating females will be killed, which results in the destruction of entire family groups. A ban on spring bear hunting would also enhance protection for grizzly bears, since they too are most vulnerable at this time of year, and as acknowledged in the DEIS, mistaken identity kills of this threatened species still occur. We disagree with statements in the DEIS that the existing spring hunt has had no detrimental effects on grizzly bears: it is a source of grizzly bear mortalities; and it has increased pressure on limited spring grizzly bear habitat. For these reasons, spring black bear hunting has been banned in all but six of the twenty-eight states (including Montana) that permit black bear hunting.

We are disappointed that the two alternatives that include banning and restricting the spring hunt did not include many important provisions of the preferred alternative, even though these provisions were unrelated to the spring hunt.

If spring bear hunting must continue, we recommend the following minimum actions: (1) establish a quota as proposed in Alternative 3; (2) end the season by May 15 or sooner, since the DEIS reveals that the bears are most vulnerable during the last two weeks of May, and since females with cubs will typically leave the den later in Spring, they too are most vulnerable in late May; and (3) prohibit spring bear hunting in grizzly bear habitat.

Black Bear Hunting in Grizzly Bear Habitat

Because of the mortality risk to grizzly bears from black bear hunters, whether by mistaken identity or otherwise, black bear hunting should be banned from all occupied grizzly bear habitat. The DEIS has no basis to downplay the impacts, and fails to support assertions that black bear hunter-related grizzly bear mortalities in Montana have been "insignificant," and that such a ban would be "impractical" and "difficult to enforce." In fact, when dealing with a species threatened with extinction, any mortalities are significant, and there is no good reason to suggest that the fifteen recorded in Montana since the grizzly was listed in 1975 are not significant. For example, six grizzly bear mortalities in ten years at the Lake/Bridge Bay Development site in Yellowstone Park were deemed significant enough to warrant an "incidental take" permit from the U.S. Fish and Wildlife Service. It is unacceptable that a prohibition of black bear baiting in grizzly bear habitat was not included in any alternatives.

Assorted Other Comments

We are pleased with several provisions in the preferred alternative.

We support the issuing of a separate license for black bears (Element O), as this will lessen the hunting pressure on the population, particularly by reducing incidental kills where (as noted in the DEIS) the hunter is less likely to discriminate between species, or whether the bear is a female with cubs. It will also better determine the demand for the black bear hunt, and revenues collected from these permits can be put toward habitat conservation to help mitigate the negative effects of the hunt and to fund important research in priority areas across the state.

We support the delayed opening date for the Fall season (Element I) for the reasons described in the DEIS, but are concerned that in many areas of the state, the season should open no earlier than October 1. Roughly one-third of the female population have weaned their yearlings by early fall, and are vulnerable to hunters. This is particularly true in areas where the whitebark pine crop is an important fall food source, in years when it is not abundant and bears are forced to forage for food in

more accessible areas. For similar reasons we advocate that any spring hunt season end no later than May 15 (see above).

Because of the unethical nature of using bait and hounds to hunt bears, and especially because of the associated mortality risk to grizzly bears, we strongly support the continued ban of these practices in the preferred alternative. For the same reasons, we support the two elements (W and X) that seek to provide clearer direction to aid in defining and enforcing this ban.

We support Elements F, R, S, and T to help prevent the conditioning and subsequent killing of depredating bears. The use of aversive conditioning (ie. the use of rubber bullets) should be promoted, since it has been effective when used in conjunction with measures to clean up the attractant. Also toward this end Elements X and I should be rewritten to require beekeepers and other agricultural operators to employ all possible non-lethal strategies prior to chasing or killing depredating bears. We strongly support all efforts by MDFWP to change the existing direction to destroy black bears that attack beeyards and consume bees. Perhaps most important to preventing the habituation and food conditioning of bears is to embark upon a stepped-up, state-wide public education effort.

We support and encourage continued efforts to install bear-proof dumpsters to reduce the habituation of both black and grizzly bears to human food and garbage, and reduce unwanted bear/human conflicts (Element II).

Thank you again for soliciting our input on this important issue. We hope you will take the time to consider these comments carefully, and we look forward to your response. Please do not hesitate to call for any further information or clarification on our position.

Sincerely,

Dave Gaillard

cc: Dale Harms, Field Supervisor, U.S. Fish and Wildlife Service

#88

DEC 08

Please consider my thoughts for the Final EIS on management of black bears in Montana.

NO SPRING BEAR HUNT!

You can't "actively promote hunter ethics" and host a spring bear hunt without contradicting yourselves.

orphaned cubs- overflowing shelter!!
vulnerable bears
soft soil during spring moisture, damage from vehicles

Why not terminate the spring hunt AND shorten the fall season if the change in dates protect more female bears?

Continuation of the spring bear hunt will cause a rising anti-hunting public sentiment.

NO BEAR HUNTING in GRIZ HABITAT?

Despite educational efforts the endangered grizzly bear still gets shot by accident.

I don't believe your population studies are acurate. Poaching for bear parts is big business and a very serious threat to the future of black and grizzly bear.

TERMINATE ALL BEAR HUNTUNG

and boosting poaching enforcement is the best idea. Bears do not need to be hunted in order to have public support to protect habitat. Continue education to lessen human/bear conflicts and insist on electric fences for bee keepers.

I support habitat protection efforts for bears and do not hunt bears.

Please keep me posted on management plans for bears and send me the Final EIS.

Sincerely,

Becky Tipler

PO BOX 1069
Choteau, MT
59422

#89

DEC 08

November 30, 1993

Graham Taylor, Regional Manager
Fish, Wildlife and Parks
1420 East Sixth Avenue
Helena, MT 59620

Dear Mr. Taylor,

This letter is written in response to an AP article appearing in the Bozeman Daily Chronicle, dated November 28, 1993 concerning the possibility of changing the present black bear regulations.

As a Montana resident I am requesting that the Dept. of FWP does not change the present black bear regulation including season dates. My request is based on the following: during the 1993 hunting season, I hunted private land, Forest Service land, and Wilderness lands and saw more black bear sign than I have in any of the last 10 years. The areas I hunted in sw Montana have a healthy black bear population. It is obvious that the current management practices are very effective.

Secondly: if there is an area in Montana where the black bear population is not what the area could sustain, why change the whole state's seasons and thereby affecting areas where the black bear population is thriving?

Thirdly, should your department's study deem it necessary to adjust seasons, do not shorten the fall season on the front of the season. I disagree with the article's comments that the female black bear is more vulnerable during this period of time.

If the annual black bear harvest includes a percentage of female black bears that should not have been harvested, (ie with cubs) than maybe more attention needs to be paid to enforcement of game violations.

Again please do not change the current black bear regulations or seasons, particularly the beginning of the fall season.

Respectfully yours,

Kirk D. Keller

Kirk D. Keller
P.O. Box 1036
Three Forks, MT 59752

#90

DEC 08

November 18, 1993

Montana Department of Fish, Wildlife & Parks
PO Box 200701
Helena, MT 59602-0701

Re: Bear Hunting Regulations

We support your alternative number 2. We advocate eliminating the spring bear hunt and that bear meat should not be wasted, (as well as mountain lion meat).

The graphs on page 88 show hunter success is down in spite of hunter effort going up, which bears out our personal observation that black bears are becoming scarce even in the NW corner of the state. We are also of the opinion that fall hunting should be delayed until after the peak huckleberry season (alternative 1), at least until the black bear population shows a healthy increase.

We furthermore oppose artificial grizzly bear implantation.

Thank you for listening.

Ole E. Leirvestad
28 Fern Hollow
Trout Creek MT
59874

Lynette Heckman
28 Fern Hollow Dr
Trout Creek, MT 59874

#91

December 7, 1993

Wildlife Division
Montana Department of Fish, Wildlife & Parks
P.O .Box 200701
Helena, MT 50620-0701

RE: comments of Draft EIS - Management of Black Bears in MT

As the deadline for submitting comments on the DEIS for black bear management rapidly approaches, and my time is scarce, I realize I must keep my comments to a minimum. My greatest interests and concerns are listed below.

1. **I support the elimination of spring black bear season in its entirety.** There is strong evidence that spring bear season is detrimentally affecting the population and that the current population is on a downward trend.

2. **I support the closure of key and specific grizzly bear areas to all black bear hunting.** There are certain ecosystems (such as the Cabinet-Yaak) or parts of grizzly bear recovery areas that harbor especially vulnerable grizzly populations. Accidental shooting and mortality of female grizzlies in these vulnerable subpopulations has profound ramifications...(the term extinction comes to mind). I feel, in the interest of preservation and recovery of a threatened species, FWP needs to take, a perhaps politically undesirable, position and close specific areas to black bear and perhaps all game hunting until those local grizzly populations can stand the incidental and accidental mortality associated with hunting season. The types of areas I advocate closing are specific in nature... a drainage where grizzlies or a grizzly is known to occupy during hunting season...an area where hunter/grizzly conflicts have occurred in the past...etc. An example of this type of area is the Flattail Cr./Flatiron Mt. drainage north of Libby.

91-1

3. **I support the increase of educational (including hunting ethics, species identification, etc) programs for both adult and subadult humans.** I would support the use and increase of license fees for this purpose.

4. **I support the separation of black bear tag from the general license.** I feel this would help separate the serious informed black bear hunters from those less versed in black bear identification. Additionally, this separation would be useful in distribution of educational materials and could result in more income from license sales.

Thank you for the opportunity to provide my comments.

Sincerely,
Lisa Fairman

Lisa Fairman
529 S. Rodney
Helena, MT 59601

#92

DEC 08

Dec. 7, 1993

Mr. Don Childress
Wildlife Division
MDFWP
P.O. Box 200701
Helena, MT 59620-0701

Dear Mr. Childress:

Thank you for the opportunity to comment on the Black Bear Management DEIS. As usual, my interests are represented by a combination of elements not covered in one Alternative.

I would like to go on record in favor of Alternative #2, but I would also like to suggest that bear tags be removed from the general Sportsman's License (element O). I believe that a great percentage of bears shot by holders of this license are killed by hunters who are not actively seeking to shoot a bear. Kind of the "oh well, I have a tag, why not" hunter. Let's save the resource for people who really want to shoot a bear. I always buy a Sportsman's License, but am always in a quandry over why a bear tag is included. I would prefer a Sportsman's License that offered deer, elk, fish and birds without including bear.

Again, thank you for this chance to respond. I applaud the Department's interest in turning the black bear population trend upward.

Sincerely,
Steve Gilbert

Steve Gilbert
721 Second
Helena, MT 59601

#93

DEC 08

1380 West Nine Mile Road
Huson, MT 59846
December 5, 1993

Wildlife Division
Montana Dept. of Fish, Wildlife & Parks
P. O. Box 200701
Helena, MT 59620-0701

I am VERY concerned about the status of black bears in northwestern Montana. In the twenty years that I have lived in the Nine Mile valley, I have seen black bear populations reduced from almost weekly sightings to two sightings in three years. And I understand from our Forest Service wildlife biologist that the Nine Mile is not an exception in this regard. Therefore I have tried to carefully review your DEIS as well as some of the recent literature on black bear studies in Montana.

Prior to the literature review, I was of a mind to ask that you terminate the Spring hunting season. Now I ask that you terminate the hunting of black bears, especially in the troubled valleys of northwestern Montana, for at least a two-year period to assess (1) exactly WHAT the species population is; (2) the percent of crucial habitat already lost due to human activities; and (3) in what ways we can better prepare for the soon-to-be-upon-us illicit worldwide trade in bear parts, e.g., increased law enforcement, closer monitoring of both legal and illegal hunting, reduction in number of black bear permits (I like your proposal for separate permits) issued, etc.

By your own graphs (p. 85 of DEIS), while hunter effort has been accelerating, percent of hunter success has been declining over the past twenty years. That trend alone in the legal taking of black bears is alarming. However, studies indicate that the illegal taking, as well as wounding of black bears in northwestern Montana (Kasworm & Manley, 1988; Thier, 1990) is considerable. Because of this, it is not clear to me how you can propose essentially a business-as-usual Alternative (1).

I believe it would be wise at this point in time to call a hiatus on the hunting of this troubled species until management plans can be based on sound data. I understand that funding is problematic, but attempts to protect or recover a species pushed to the brink of endangerment are far more expensive as well as uncertain of success.

Thank you for the opportunity to respond to this DEIS, and for your consideration of this letter.

Eleanor Danesh
Eleanor Danesh

#94

DEC 08

1824 5th Ave
Helena, MT 59601

December 7, 1993

Wildlife Division
MDFWP
P O Box 200701
Helena, MT 59620-0701

RE: Black Bear DEIS

Dear MDFWP:

Pages 44 to 46 illustrate that we have a long way to go in order to assess population trends. There doesn't appear to be enough information about black bear trends to reliably know how to effect good management. I support greater research efforts. There needs to be a concerted effort in this direction. The black bear is not a commodity. We need to know impacts to population trends which can only come from good research. That's number one.

I would not like to see a spring black bear hunt, especially in grizzly (occupied) areas. The impacts on the threatened grizzly may impact the recovery effort. Accidental mortalities upon grizzlies are not worth the risk.

The livestock redistribution program (for grizzlies) along the Front needs public scrutiny. Impacts to black bears in this context need greater emphasis. Black bear & grizzly research should be an intrinse part of that program. Sincerely, John Vollertsen

#95

DEC 08

December 7, 1993

Wildlife Division
MT Dept Fish Wildlife & Parks
P.O. Box 200701
Helena, MT 59620-0701

Ken Knudson
540 Breckenridge
Helena, MT 59601

Dear DFWP:

Regarding the DRAFT EIS for the MANAGEMENT of BLACK BEARS IN MONTANA, I AM IN FAVOR OF ALTERNATIVE 2, TERMINATION of SPRING BLACK BEAR HUNTING. Based upon the decline in hunter success rates (Appendix 2; Fig 1) AND my PERSONAL observations in places where I have frequently hiked over the years, Montana's BLACK BEAR POPULATION APPEARS to be IN A decline. I agree that the SPRING hunt IS the MAJOR cause of ~~the~~ ORPHANED cubs, which are needed to rebuild the population. Without the SPRING hunt the expenditure of license dollars to upgrade the FWP animal shelter would become UNNECESSARY and the funds spent for better purposes like hiring a full-time black bear biologist.

While I am STRONGLY IN FAVOR of our AUTUMN hunting season, which is AN IRREPLACEABLE Montana [redacted] I see NO REASON to KEEP extending [redacted] edge to spring, when the woods are [redacted] filled with hikers/animal watchers, [redacted] that the preferred Alt - [redacted] doesn't go far enough in addressing the Black Bear plight. I disagree with the provision to remove BLACK BEARS from the Sportsman's License.

Sincerely,
Ken Knudson

#96

DEC 08

November 27, 1993

Wildlife Division
Montana Dept. of Fish Wildlife & Parks
P.O. Box 200701
Helena, Montana 596201-0701

Re: BLACK BEAR DRAFT EIS

Dear Mr. Childress,

After being in attendance at the public comment hearing which was held at the Outlaw Inn on the 17th of November, I feel compelled to voice my opinion with regards to the current issue on the management of the black bear.

I would also like to point out that I am a user of the back-country and the wilderness and have been involved with the Grizzly Bear issue also.

The meeting began with some direct inquiries pertaining to the number of known black bears within the Montana region and what has prompted this proposed action of "management"? Much to my chagrin, NO ONE within your staff of representatives could even offer an "estimated guess" as to the population of the black bear in Montana! Additionally, it was then pointed out that a great deal "of pressure, not threats, by the environmentalists, had a major role in this study and subsequent issue being implemented". In direct response to the aforementioned, if you are not even aware of the number(population) of the existing black bears, how do you know there is a problem with their diminishing existance? And secondly, why is a handful of environmentalists so effective with their efforts for management and control and the masses of hunters, hikers, and back-country users opinions so minimized? This is in essence, the same scenario as the issue with the Grizzly Bear population. 96-1

As the meeting progressed, there were numerous "errors" brought to the attention of the spokesperson. Admittedly, there was a combination of typographical error, human error, contradictory comparisons, and statistics within the draft. When an inquiry was made as to the availability of the "corrected draft" for the public to view and or comment on, we were advised that there would be no such allowance! 96-2

Utilizing the draft EIS as it was proposed, I feel that it was very poorly prepared and that the general public is not being properly advised to the facts and statistics as they are documented. Of the five proposed "solutions" to the black bear management, I strongly support Alternative #5- NO ACTION! And furthermore, I feel that until an accurate accounting of the bears and the mortality rate of same is current, that this taxpayer's dollars could well be spent on other issues, that actually need MANAGEMENT!

Sincerely,
Jinny M. Curtiss
Jinny M. Curtiss
cc/ The Daily Interlake / Hungry Horse News

#97

DEC 08

Box 26
Neihart, MT 59465
December 4, 1993

Wildlife Division
Montana Dept. of Fish, Wildlife & Parks
P. O. Box 200701
Helena, MT 59620-0701

Gentlemen: Re: black bear management

I believe the department should consider adding a form of this suggestion to their regulations:

"It shall be illegal at any time of the year to attempt to kill anything within about 300 yds. of any garbage dumsters."

This would include firearms or bow and arrow, etc. hunters. I've seen too many "so-called hunters" sitting 50 or 100 yards in their car waiting for some luckless bear to come down. Any way you put this isn't it bear baiting?

Naturally, Department management would be an exception.

Very truly yours,
G. L. Bourke
G. L. Bourke

#98

DEC 08

Dec. 6th 1993

Meagher County Sportsmen Assoc.
Box P
White Sulphur Springs Mt. 59645

Montana Department of Fish Wildlife and Parks
1420 East Sixth Avenue
Helena Mt

Dear Sir

This letter is in regard to your Black Bear draft EIS.

Our only comment would be that we do not feel there is a need to shorten the spring bear season in region 4 (ending spring season June 1st) 10-15% of our harvest takes place between June 1st and June 15th. The bear numbers and age structure are quite adequate to support a spring season of April 15th - June 15th. Please incorporate these comments into your final E.I.S.

Sincerely Yours
Jess Secrest Vice President MCSA

#99

POB 153
Gordan, Mt 59337

DEC 08

Wildlife Division
Montana Dept. Of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Montana 59620-0701

SUBJECT: BLACK BEAR EIS

Division Personnel,

Thank you for the opportunity to comment on this EIS.

My preference to this decision is the Alternative #5 (no action). A number of the 31 elements under the Proposed Action could still be done/implemented by the FWP---through management decisions.

My next preference is Alternative #3 (Spring Hunting Regulated by Quotas). I do not agree with some of the elements with this Alternative----see below explanation labeled----"elements disagreed with".

First, I would like to express that the Holy Bible states: (Genesis 1: 27-28, So God created man ... and God said to them, "Be fruitful and multiply, and fill the earth and subdue it and have dominion over the fish of the sea and over the birds of the air and over every living things that moves upon the earth."
I don't think that God wanted us to make all species extinct, but he did not want the living things to have control/dominion over humans. A number of proposals in the last [illegible] sure have had a focus on the living things [illegible] humans. Many coming from our Wildlife organizations (cougars, grizzly bears, state access, etc.)

Also, one of your management goals is to maintain our commitment to improve landowner and sportsperson relations. Please concentration on this goal, the emphasis is really needed with the current pressures on these individuals.

Encourage [illegible] to [illegible] on their [illegible]. The element "2" [illegible] annual standardized statewide report and analysis of black bear management data, to [illegible] is an important step with or without the EIS.
The decisions or proposals surrounding the wildlife issues are be ng examined closer and closer. The proposals need to be made on well established facts/data. Until they have been established, proposals should not be made available to the public.

Examples: (p. 25) (under letter M)
...bears are particularly long-lived...only every third year, population changes can be difficult to detect in less than a span of several years. Year-to-year variation in harvest may simply reflect variation in availability of preferred bear foods, weather patterns, and other factors, rather than real changes in population trend."

and (p. 46) (under Assessment of population status and trend)
"There is no cookbook approach to black bear management. Garshelis maintains... management is as much an art as it is a science. He recommends ...."

The reason for this EIS doesn't based it purpose on any concrete or stable information. The above statement leaves the information as theories, opinions, lukewarm, not credible.

"elements disagreed with"

F) [illegible] Management I incorporated--pg. 32
Encourage beekeepers...
Increase emphasis... for nuisance bear....'
FWP will encourage ADC to assist only ...
Explain the hazards of the hives located in the area of known Black Bear Habitat/Findings----information exposure.
Provide the supplies and assistance (proved installation assistance by personnel) to the beekeepers so the number of nuisance bears would be reduced.
Requiring the preventive measures will not work. Free supplies and services in installation (that will work for their access and managing) will assist considerably.

L) Actively promote good hunter ethics ....
M) Adopt the following management ....
Information exposure is important and helpful if read. Hunting and shooting bears is not a long drawn out process. Identification of the type of bear (grizzly vs black) is possible. If it is a female (with a cub) vs. a male is limited---cub could be hiding. The act of determining sex and age is not common sense in hunting. We are kidding ourselves if the hunters hunting in Montana will do this.

N) Institute mandatory inspection and tagging...
Uncertain if this will work. If it can be added to the responsibilities that the FWP personnel does now, it could work. Hunters don't like delays and restrictions anymore than they have to already. We are kidding ourselves if the rules and restrictions are made more time consuming.

P) Upgrade the FWP animal shelter...
Care for abandoned animals is nice, but this element is the symptom not the problem. Discouraging or prohibiting individuals from picking up cubs would be the best approach. Better information exposure on the proper methods----only by authorized personnel would be more effective.

S) Institute a public information...
Information and education is very helpful for interested readers. The statement of holding people accountable for their own actions when living in bear habitat is wrong. The survival of humans on private land is first, there is adequate habitat in the Montana for the bears that the people do not need to be held accountable. (this is a general rule statement)

[illegible] thanks for the opportunity to comment on the draft Black Bear EIS. Your Department is under alot of public pressure surrounding the Wildlife. Please consider the views of the Knowledgeable Montanans in management planning----they have lived here, they are closer to the situation, and not brainwashed by the TV media---which are establishing human traits onto animals.

Sincerely,
Clarence W. Clayton

Resident of Montana for all 37 years
Big Timber, Conrad, Eureka, Choteau, Jordan

#100

Dec. 6 #100

Subject Spring Bear Hunts.

I feel spring bear hunting is unethical and should be stopped. Bear hunters are egocentric twirps! Give the bears a chance! Eliminate spring hunts - to protect: Female Griz + Black Bears with cubs and to allow hungry bears a chance to recover from a long winter. Also require that all meat be used of animals that are killed at any time of year. Hunters can't identify Brown Black bears from Griz. Heck some hunters can't tell the difference between a yellow dog and a bear, so don't expect much more from them. I've seen hundreds of grizz and black bears in the wild while working as a back country ranger in Glacier Park - and it can be extremely difficult to tell the difference between black + grizz bears.

Thank you,

GARY VADEHNAL
614 South 7th
Bozeman, MT
59715

#101

DEC 08

John C. Parker Ph.D.
1602 Bull River Rd.
Noxon, MT 59853
406-295-4588

December 6, 1993

Don A. Childress, Administrator
Wildlife Division
Montana Dept. of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620

Dear Mr. Childress,

Unfortunately I was not aware of this EIS until last Fnday when I saw the notice published in the Missoulian and called to get a copy of the Black Bear Management Draft EIS. Below are my abbreviated comments.

- Support Alternative #2: My comments are mostly in regard the spring bear hunt which I am opposed to on both ethical or scientific grounds. What is the States reason for justifying a Spring Bear season, I have never understood it? I suggest there is no adequate justification! The data in figures 1 & 2 Appendix 2 can be interpreted 2 ways. 1) Hunter pressure has been increasing over the past 20 years and the number of bears killed has been decreasing proportionally, or 2) Habitat loss is responsible for the reduction in bears. In either case there is support for discontinuing the spring bear season. 101-1

  It is stated that FW&P believes that the spring bear season keeps bears wary of man. I do not believe there is any convincing data to support this scientifically and is just an excuse to justify the hunt. McCollough's data is probably in error although I admit I have not seen the 1982 publication so really cannot comment. In National Parks where hunting is prohibited I am not aware that black bears are attacking adults or children or becoming a greater nuisance when all factors are considered. Spring bear season is something left over from antiquity when so called hunters just wanted high quality winter furs before they begin to lose quality in the warm weather and has nothing to do with sportsmanship. It's barbanc to hunt bears that cannot be sexually distinguished and kill females with cubs allowing the cubs to oftentimes slowly starve to death or be killed by predation. is this responsible game management? I think not!

  I am also totally against sport trophy hunting which leaves the meat in the field to rot. Its senseless! All hunters should eat what they kill in my opinion. The spring hunt is also intrusive in the forest as recreationist's once again, as in the fall, have to be concerned about wearing hunter orange for protection and hunters shooting around them. I train Llama's to pack and the spring is an active time for me to get my Llamas in shape by hiking mountain trails and also going cross country. The thought of having hunters with high powered rifles perhaps shooting at my Llamas, mistaken for bears, is not unrealistic. A human was shot by a hunter near Troy in 1992 thinking he was an elk!

  There is no question that Black bear hunters kill grizzly bears. The question is why? Many people believe its the SSS rule that's followed and as a person who spent 3 years on a citizens advisory group for grizzly bear augmentation I believe its too often true. If you want to save grizzly bears then put more limits on bear season, especially the spring season.

- My second choice if Alternative #2 is rejected is to select Alternative #3 which would give the black bear at least some sensible protection in the spring.

- If Alternative #1 is adopted I would make he following comments;

  Support adjustment Elements I, J (although the May 31 date is too vague and closing should be a fixed date), K, & L.

  New program initiatives: M is too vague and does not allow for effective and timely management to reach the goals desired. Probably a good idea to collect the data first and then institute any necessary management changes and element (N) will help do that. Strongly support an improved system for detection of illegal hunting activities. I constantly hear about illegal hunting in our area (the Cabinets) but there is no enforcement pressure here and even when illegal hunting is observed and reported the offenders are often not prosecuted for some reason! Strongly support elements U, V, & W and support elements X ,Y, & Z.

I hope my comments are of some value to your analysis. Good luck on a tough action proposal,

Sincerely,

John Parker

P.S. I would like to put on the mailing list for future public input documents, EIA's, EIS's, etc.

#102

DEC 08

****

COMMENT FORM

****

NAME: Michael Ware

ADDRESS: 61 Harbin Hill Rd Kalispell, MT 59901

AFFILIATION:

Please provide your comments below. Attach additional sheets to this form if you wish.

I would prefer the FWP to choose #5 instead of #1. A-L are good if followed to complete detail (such as L) some of the proposed action elements are too strong and for reading such as M, N, O, P. Pescould and should be fine with out this proposed action. M will be taken care of by all the current and future Road Closures that will drastically reduce harvest of both male and female bears. U, with a maximum of 15% trichinosis infected bears out there I feel this could lead to "some" hunters opting out of bear hunting because they couldn't eat or give away the meat. I consider this type of hunter the kind that plans on taking only one bear in their life for the purpose of a mount they plan on keeping. Many people I know already don't hunt bears because of their meat and possibility of it being infected.

gen\com.for

#103

MYNI FERGUSON
395 Blanchard Lake Drive
Whitefish, MT 59937
Tel. (406) 862 5443

ARTIST & DESIGNER
OF
ART GLASS
CUSTOM SALES
BY APPOINTMENT ONLY

DEC 08

12/6/93

Re Buick Bear DEIS

I applaud Montana FWP for wanting to tighten up on Black Bear hunting regulations and strongly urge you to join the rest of mainstream black bear management nationwide and ban the Spring hunt.

Thankyou,

Myni Ferguson

#104

DEC 08

12-6-93

Paul M. Murphy
P.O. Box 881
Columbia Falls MT 59912
U.S. SHOOTING TEAM

Wildlife Div.
Mt. Dept. F. W. P.
PO Box 200701
Helena, Mt. 59620

Dear Sir;

Regarding the draft Black Bear EIS, I prefer alternative number 3.

Yours truly,
Paul M. Murphy

#105

Mike Barney
406 Poplar
Glendive, MT

In favor of a moderate spring black bear season - and - additionally hes a real problem with those people that have a problem with it - does not think they heve the right to tell him what he should be doing. Thanked us for the job we are doing

#107

DEC 09 '93

Montana Audubon Council

Stote Office: P.O. Box 595 • Helena, MT 59624 • (406) 443-3949

Chapters:

Bitterroot Audubon
Bitterroot Valley

Flathead Audubon
Flathead Valley

Five Valleys Audubon
Missoula

Last chance Audubon
Helena

Pintlar Audubon
Southwest Montana

Rosebud Audubon
Miles City

Sacajawea Audubon
Bozeman

Upper Missouri
Breaks Audubon
Great Falls

Yellowstone Valley
Audubon
Billings

Wildlife Division
Montana Dept. of Fish, Wildlife & Parks
1420 E. 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Hello,

December 7, 1993

On behalf of the Montana Audubon Council, we submit the following comments on the Draft EIS: Management of Black Bears in Montana .

The Montana Audubon Council is the coordinating voice of the nine chapters of the National Audubon Society in Montana. Our membership currently stands at approximately 2,400.

There are several general comments we have about the document:

1) We are surprised by how little is known about Montana black bear populations.

2) Throughout the EIS there seems to be an underlying concern about the overharvest of female black bears. There are many elements that deal with reducing the number of females harvested, yet there is no discussion about whether or not there is currently an overharvest problem. Why? | 107-1

3) We are unclear why Alternatives 2 and 3 do not change the earliest fall hunting season date to September 15. This does not make sense. | 107-2

4) We are also unclear why FWP supports quotas (element B) but does not support quotas in the spring (Alternative 3). The spring hunt is the time when most females are harvested (something FWP is trying to reduce) . | 107-3

5) We question whether some blend of Alternative 1, 2 and 3 would be most appropriate: not have a spring season in certain districts, | 107-4

recycled paper

have quotas in others, and/or allow a spring season without quotas in other districts. | 107-4

6) Were the grizzly bears killed by black bear hunters located in one district or in many districts? Their mistaken identity may be statistically significant if the grizzlies were killed in only one - or even a few - districts. | 107-5

7) On page 5, paragraph 1 deals specifically with 87-1-201, the purpose statement for the Montana Department of Fish, Wildlife & Parks. The first sentence of the powers and duties of the FWP states that the FWP "shall supervise all the wildlife...of the state." It seems unusual for the introduction of the EIS to list a subset of wildlife that it is responsible for. The FWP has a small nongame program that is spending resources on amphibians right now. Additionally, the FWP is involved in endangered species programs. We assume that today's interpretation of "supervise all the wildlife" would mean "protect, preserve, and perpetuate" all wildlife. | 107-6

8) Page 13, Alternatives Scoping. The slide series identifying the difference between black bear/grizzly bear identification is "routinely" presented to hunter education classes, as well as other groups. We would like to see this program mandated for all hunter education classes.

We also have the following comments on specific elements of the EIS:

A) The purpose for continuation of the existing spring and fall black bear hunting season is said to be to "keep black bear populations "wild" by maintaining wariness of humans..." Is there proof that a hunting season provides this? I have heard this issue debated amongst bear biologists - but have never seen the data that proves that wariness is a direct result of a hunting season. The reference to McCollough (1982) to justify hunting does not seems to be based in scientific research, just speculation. | 107-7

The Montana Audubon Council does not have a problem with a bear hunting season as long as bear populations can sustain a season. The rationale justifying the hunting season should be based on fact, however. "Providing hunting recreation by the public" is an adequate purpose.

C) Very important.

D) Using the tooth to age black bears is central to the FWP management program. In the discussion of this section, it states that "aging of black bear *can be expected* to be even more accurate than those of grizzly bears." From that statement, we assume that there have never been conclusive research on this subject. We also assume that FWP would initiate the research so that this statement could be made more affirmatively. | 107-8

E) We support the prohibition of using both baits and/or hounds to pursue black

bears.

F). Beekeepers should be required to use preventive measures in chronic black bear depredation areas NOT encouraged.

G). Can this be worded stronger? FWP should actively advocate for black bear habitat needs during city and county planning processes.

H). This step is important. It would be particularly useful to gather information in a way that could be mapped using the GIS process.

I). We agree with delaying the opening season date to September 15. We assume that FWP will monitor the effectiveness of delaying the date to see if further modifications are mandated, especially in individual districts.

J). What information goes out with houndsmen regarding the fact that it is illegal to pursue bears? Even with the later opening date, mountain lion season overlaps with the March 21 date that bears have been seen leaving their dens. | 107-9

K). FWP should target Montana's rural subdivisions for the information on living with bears.

L). It is critical to support good hunter ethics. What can FWP learn from the Enforcement Division's decoy work - where so many hunters shot females with cubs? This information was shocking to me - and discouraging. We trust that FWP will try to actively work with hunters to make them understand the consequences of shooting a female with cubs.

The Montana Audubon Council supports all of the New Program Initiative, with the following specific comments on elements of this program:

M). We would support changing this element so that no more than 35% of the annual harvest be comprised of females. Beecham recommends that harvest be regulated to maintain female composition at 35% or less. FWP should manage the black bear population conservatively since bears are very susceptible to over-hunting.

S). There should be legislation that makes it illegal to feed bears. If individuals are fined when bears get in their garbage, there will be more effort to prevent chronic bear problems.

U). This is good. How many hunters use 100% of the meat?

Z). Please add us to your mailing list to receive your annual report. It would be useful to also include grizzly bear information in this report. Centralizing

information is critical. It will give managers - and wildlife advocates - an important tool to use in efforts to protect bear habitat and populations.

II). Although FWP does not have the authority to require any government entity to install bear-proof facilities, it certainly has the ability to pursue Memorandums of Understanding (MOU's) with governments and private entities!

When considering issues that must be considered by FWP in your management program, we would encourage you to carefully examine black bear depredation issues. Last fall we surveyed each region of the FWP for information on the amount of time - and money - that was going towards depredation issues created by rural subdivisions. It was clear, in most regions, that wardens were spending more and more time on wildlife depredation issues related to rural subdivisions. But the FWP was not documenting the amount of time dedicated to this issue (versus depredation on agricultural land/rangeland). This seems like important information to collect if the FWP is to build a case for its involvement in land use planning.

Thank you for the opportunity to comment on this document. If you have any questions or comments about this letter, please contact me.

Sincerely,

Janet H. Ellis

Janet H. Ellis
Program Director

#106

DEC 09 1993

Ravalli County Fish & Wildlife Association

PO BOX 938 • HAMILTON, MONTANA 59840-0938

December 7, 1993

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, Mt. 59620-0701

Dear Mr. Childress,

Thank you for the opportunity to respond to your Draft EIS on black bear management. Our response is a little late because our organization did not hold a November general meeting and our December general meeting was held the 6th of December. We wanted our general membership to have a chance to respond to this EIS on black bear.

The general membership basically agreed with the No. 1 Proposed Action, with a couple exceptions. Our membership voted on some exceptions.

Element 1: Sept. 15th start instead of Sept. 1. We feel this should be managed area specific or Bear Management Unit specific. In Region 2, we do not have the bear concentration on berries that occurs in the northwest corner of the state. We do not have the moisture conducive to grow a large berry crop. Also your age information doesn't really establish a problem with bear age in this area.

Item U: Mandatory use of the meat was actively discussed and voted on to agree with the mandatory use of meat.

Item W: Baiting and scents. We feel the two issues should be separated. We agree baiting should be illegal, but feel the use of scents, non edible, should be legal for all game species. You may need to refine the term scent so the hunters know what is legal. The way the law is now, the sportsman really doesn't know where they stand on the use of scent. It was also voted that it be legal to hunt over any naturally dead animal, or any legally harvested game remain pile.

106-1

This was a very well thought out Draft and something that will be necessary in the future . You did a great job. Why not get started on a deer management plan? The sportsmen of Montana desire an in-depth study of age diversity in our leading game animal, the mule deer.

Thanks once again for the opportunity to comment.

Gary Habeck
Gary Habeck
Big Game Committee Chairman

C.C. Rich Clough
C.C. John Firebaugh
C.C. Lyn Nielsen

#108

DEC 09 1993

November 18, 1993

Montana Department of Fish, Wildlife & Parks
PO Box 200701
Helena, MT 59602-0701

Re Bear Hunting Regulations

We support your alternative number 2. We advocate eliminating the spring bear hunt and that bear meat should not be wasted, (as well as mountain lion meat).

The graphs on page 88 show hunter success is down in spite of hunter effort going up, which bears out our personal observation that black bears are becoming scarce even in the NW corner of the state. We are also of the opinion that fall hunting should be delayed until after the peak huckleberry season (alternative 1), at least until the black bear population shows a healthy increase.

We furthermore oppose artificial grizzly bear implantation.

Thank you for listening.

Michael H Czerwinski
Kitty F Czerwinski
2615 Hwy 200
Trout Creek, MT 59874

#109

DEC 09 1993

Wolf Action Group
P.O. Box 9286
Missoula, MT 59807

Wildlife Division
Montana Department of Fish, Wildlife and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dear Wildlife Division:

As a member of the Wolf Action Group and a student of wildlife biology I have compiled some comments and considerations on the DEIS for Management of Black Bears in Montana. I hope these comments are given serious consideration and I would like them to be included in the official record on the DEIS.

The Proposed Action, although not without merit, seems a vain attempt at managing black bears and should not be adopted as written. Alternative 4, therefore, with its use of many elements found in the Proposed Action, while at the same time eliminating hunting, is a more logical and humane approach.

I. Hunting Predators

Hunting of black bears, or any predator for that matter, should be eliminated at all costs. It is our responsibility as humans and managers of wildlife to keep the ecosystem intact. The idea of hunting predators totally destroys this idea and will eventually destroy our ecosystem.

The black bear is a vital part of the ecosystem and their place in the ecosystem should not be ignored. The black bear is a major contributor in the control of insects and some big game species. The prey is there and is in no danger of losing its footing in the ecosystem. Yet, to destroy main predators of such prey is asking for serious overpopulation problems. Furthermore, as stated by alternative 4, eliminating hunting of the black bear will not cause a significant increase in their numbers. Thus, to hunt the black bear and put the entire species in danger is to ignore their place and role in the ecosystem. In addition, a decrease in black bears will assuredly see an increase in the populations of such species as ants. The black bear offers a natural/biological control of such species which is vital to the functioning of the ecosystem.

Predators, such as the black bear, also offer another vital role in the ecosystem. Their consumption of berries helps to keep these plant species healthy and well populated. To eliminate the bear, through hunting, could lead to disaterous declines in plant species which are equally vital to the ecosystem.

All in all the health of our ecosystem is threatened when the mere discussion of eliminating predators becomes a topic. In order for the ecosystem to function it needs to have all its functioning parts. Therefore, hunting predator species, such as the black bear, should be eliminated or the very structure of our ecosystem will be in danger.

II. Human Pressures

The black bear has already endured numerous pressures by human development which have taken the lives of countless animals. Thus, to hunt the black bear only serves to put more pressure on the animal. In the long run, the combination of these two pressures will prove to be detrimental to the black bears survival. As human populations increase the likelihood of development subsiding would be rare. Thus, the elimination of hunting practices should be enforced in order to help the black bear population remain viable.

III. Hunting as a management Tool

Although adjustments to black bear management have been suggested, such as elements H, I, J, M, and N, the hunting of black bears is unacceptable. Even if such adjustments are enforced, problems arise that could put the black bear, as well as the grizzly bear, in jeopardy.

1. Orphaned black bears lose their place in the ecosystem. Although shelters offer them a way to stay alive, their role as healthy viable black bears in the ecosystem is denied. A successful return of these bears to there original habitat is unlikely. Thus, their role as reproducers and natural control agents in the ecosystem is never obtainable. The killing of one mother bear, therefore, has the ability to reduce the population by about four bears. The DEIS's estimate of 10-15 cubs placed in the shelter annually is unacceptable and at times frightening. The effects of losing this many bears in the ecosystem annually may be unrecoverable and certainly detrimental to the viability of the species.
2. Even with quotas and conservative harvests, over-harvesting, especially for females with young, may occur.
3. The effects on grizzly bears is yet undetermined. Hunting black bears could have serious consequences on the threatened grizzly population struggling to obtain viable numbers. Although classes and pamphlets offer help in distinguishing one bear from the other,

accidents will happen. Too many of these accidents could lead to the destruction of another important predator, the grizzly bear.

IV. Sport Hunting

Sport hunting is unethical and inhumane and should not even be considered as a hunting method. Although element U would discourage sport or trophy hunting by requiring the meat to be used, the fact still remains that those interested in gaining a trophy will do so at any cost. In addition, elements U and V, although show great effort in trying to eliminate the waste of black bear parts and the illegal trafficking of such parts, seem a feeble attempt which would likely be hard to control or manage. The hunting of bears, especially sport hunting is unethical.

Juat as with baiting and the uae of dogs, hunting black bears, in any fashion should be an illegal act and should be eliminated. In light of the possible effects hunting could have on the black bear and the ecosystem, Alternative 4, no hunting, seems the only ethical and humane management tool. The ideas in Alternative 4 seem fair and logical while at the same time allow the bear to keep its vital place and function in the ecosystem. If we have any hope of allowing the black bear to remain a vital part of the ecosyatem then hunting must be eliminated. Hunting black bears will only serve to destroy an entire species and in turn a major part of the ecosystem

Thank You,

Monica Best

Monica Best
Wolf Action Group
The Ecology Center

#110

DEC 09 1993

Wildlife Division
Fish, Wildlife & Parks
1420 E. Sixth Avenue
POB 200701
Helena, MT 59620-0701

December 3, 1993

Enclosed are my comments on your draft EIS on management of black bear populations in Montana.

Thank You for the opportunity to comment on this EIS.

I support the Department's Proposed Action. Some comments on this proposal are:

1. On page 54, the impacts of black bear management stated that no economic impact to the program would be detected. Since the sportsman's license does not contributa to black bear management (a surprise to me) and this tag will no longer be available on this license, hunters will be required to purchase the tag separately. I assume that a direct purchase of a black bear tag will support the program somewhat, thua an added benefit to this alternative.

2. Element "U", mandatory use of the meat of hunter harvested bear meat. I support the maximization of all harvested animals, but was unable to determine the definition of mandatory use of the meat. Given the concern for trichinosis and what I feel was likely the initial reasoning for many states not requiring the consumption of bear meat...the fact that it isn't a cloven hoof animal.... accepted use of bear meat as pet food would hopefully qualify as use. 110-1

Again, thank you for the opportunity to comment on the proposed management changes. I look forward to the adoption of the proposed alternative. Please keep me informed of the outcome of this and other upcoming FW&P proposals.

Sincerely,

Earl Applekamp

Earl Applekamp
4775 Hoover Lane
Stevensville, MT 59870

#111

12/10/93 am

Telephone call from Edward Pierce (214 14th Ave. S.W., Sidney, MT 59270)

Bear hunter living in E. MT. Hunt bears in the spring - enjoy taking a mountain bike on gated roads and hunting bears and taking pictures - relaxing and enjoying myself. Have taken 3 bears in 6 years - probably wouldn't shoot the same bears in the fall due to the quality of the coat. If there is a population problem, spring hunting could be curtailed. But personally, I would like to see the spring season preserved. If it is eliminated in Montana, I will spend my money elsewhere (other states/provinces) hunting bears in the spring.

#112

Bounty Awards — L. Dreibus-Robinson
Arms Locks Dredge-Robinson — Personal recognition for the dominant waterdove and elk dragons — Joseph Bonaparte awarding in the Kennedy Art Center Washington, D.C.
Watercolors • Drawings • Commissions • Advertising • Landscapes • Portraits
P.O. Box 295 • Lolo, Montana 59847 • (406) 273 5499

I am an avid big game hunter, but I do not think the Spring Bear Hunt is responsible game management. I say Stop the Spring Bear Hunt, it is unfair/unjust to responsible hunters.

Ted Poulsen
Box 804
Big Fork, Mt.
59911

#112

USA 29

Wildlife Dept
Mt. Dept. of FW+P
Po. Box 200701
Helena, Mt
59620-0701

#113

DEC 10 1993

PO Box 80288
Billings, MT 59108
December 2, 1993

State of Montana
Dept. of Fish, Wildlife and Parks
PO Box 8012
Helena, MT 59604-8012

RECEIVED
DEC 0 / 1993
INFO. DESK - CED

To Whom It May Concern:

A recent article in the Billings Gazette concerning restrictions on black bear hunting in the State of Montana has prompted me to write and voice my concern about the implementation of more restrictive regulations.

I have a summer home in the Whispering Pines area of the main Boulder River south of Big Timber, and have been hunting and fishing in that canyon for over 40 years. During that time I have seen many, many different black bears, with a large concentration around the Whispering Pines area. I have seen bears every summer and fall, and am accustomed to their pattern of activity. I have also watched the regulations for hunting these animals change from unlimited spring, summer and fall hunting to the present spring and fall limitations on numbers taken.

As the seasons have become more restrictive, the bear population has increased drastically, since you have taken away one of the best management tools for controlling animal numbers - that being the hunter. This past summer was especially high on bear sightings in our area. During the week following Memorial Day, I saw four different bears within a two mile radius of my cabin - a cub, a female, and a young male and a mature boar. These bears were continually in the area and were seen on a daily basis, until it was necessary to trap and transplant the animals. It is my understanding that one of the bears was shot in our area after repeated attempts at relocation failed. In the fall, another large boar showed up in the area, and remained until about 2 weeks before the hunting season opened again in October.

Many of these bears become problem animals, losing their fear of man, eating garbage, and so on. Then they have to be trapped, relocated, or destroyed. It has become obvious to me that the cause has been the population explosion created by the restrictive hunting seasons placed on the animal, whereby smaller and smaller numbers can be taken, allowing the population to increase dramatically. Again, a good management tool, the hunter, is being gradually removed from the scene. Since the bears are not exposed to hunters, they will quickly lose their natural fear of man. Now it appears the biologists want more restrictions, to the point of allowing no hunting of the animals. To my way of thinking, this will only create more and more bear/man confrontations, and more management problems. It would seem more reasonable to me that the restrictions be lessened instead of made greater so that the populations are not allowed to grow unchecked.

I am in favor of using all of the animal for meat, as the bear is quite palatable. I shot a bear this spring hunting near Judith Gap, and have found the meat to be very edible.

It is usually not difficult to distinguish between a mature boar and a sow by an experienced hunter. The boars are usually the first out of the dens in the spring, and sows are generally accompanied by cubs, making them very easy to recognize. There is usually a noticable difference in size as well.

I fear that if the biologists have their way, there will be a serious overpopulation of bears, creating many more problems. I think that areas should be looked at on an individual basis, with more hunting allowed in those areas with large bear populations, such as the Boulder River Drainage.

I thank you for your time and for allowing me to comment on the proposed changes for hunting of bears in Montana.

Sincerely,

Ronald C. Freund

Ronald C. Freund

#114

#10

Dec. 2, 1993
Billings, MT

Department of Fish, Wild life and Parks
Helena, MT

Dear FWP:

I am writing in regards to possible rule changes on how black bears are hunted. I do not feel reducing the season by two weeks in the fall and spring is the method to improve female black bear longevity. Female bears are protected by not shooting a female with cubs. Also the harvest quota and the seasons end when the female harvest has been reached.

There seems to be no logic in reducing the season by two weeks because between harvest quotas and not shooting a female with cubs, enough to maintain a healthy female population.

I've not noticed a decrease in the black bear population and have been out hunting. Educating bear hunters on the differences between females and males bears would be more appropriate in managing the black bear population.

I strongly disagree to any changes in the current regulations concerning black bear hunting.

A concerned hunter

Kim Chambers
Sturgis, SD postmark
No address

MONTANA OUTFITTERS & GUIDES ASSOC.

33 S. Last Chance Gulch, Suite 2 B • P.O. Box 1248 • Helena, MT 59624 • (406) 449-3578

"Where respect for the resource and a quality experience for the client go hand in hand."

#115

December 10, 1993

Glenn Erickson
Wildlife Division
Montana Department of Fish, Wildlife and Parks
1420 Sixth Avenue
Helena, MT 59620

Dear Glenn:

The Montana Outfitters and Guides Association wish to offer the following comments regarding the DEIS on Black Bear Management:

1. There is no baseline on actual bear numbers and apparently no plan for one. Instead, FWP plans to use the percentage of female bears harvested as an indicator. We question whether this will be acceptable to the anti-hunting activists.

2. Further restricting the spring bear hunt dates to expire at the end of May (at the latest) will have the following effects:

   A) Hunter opportunity will be limited (two - three weeks in some areas).
   B) Hunter harvest will be curtailed significantly: up to 30% of adult bears, if a restrictive May 15 cut-off is imposed.
   C) When the numbers of nonresidents buying licenses are significantly decreased because of a decrease in hunter opportunity and a lower probability of bagging a bear, funding for black bear management will suffer.
   D) As "C" above occurs, there will be a definite and major impact on the local economics as nonresident hunter (guided and nonguided) numbers decline.

   For these reasons, MOGA supports retaining June 15 as the closing date where that date is currently in place.

   MOGA also supports opening the black bear season September 15 as opposed to the first Saturday in September.

3. Section "J" on page 22 states "Based on the apparent vulnerability of black bears to hunting harvest during the last half of May, it is anticipated that the spring season would be closed in many hunting units prior to May 31." Using this logic, it follows that the elk season should be closed after November 1 as it typically begins to snow about this time and everyone knows elk are more vulnerable to hunting pressure in the snow. It also follows that it is FWP's intent to continue selling as many licenses as possible in spite of further limiting the hunting public's realistic chances of bagging their game. Remember, hunting success is only 10% prior to the proposed restrictions.

4. The DEIS is drawn up and proposals developed as though there is a carefully documented decrease in the number of black bears in Montana. Where is the data to support that implication? We would suggest that "guided-hunter success" would be a much better long-term prognosticator of black bear numbers than the "hunter success" graph (figure 1) used. Why? A man who earns his living by providing a successful hunt, will be less inclined to be affected by such variables as weather, local economy, recent black bear stories in hunting magazines, etc. 115-1

5. The DEIS does not address the question MOGA raised concerning the accuracy of tooth aging. As age is a key indicator in bear population viability, the accuracy of aging becomes paramount. Numerous individuals from the Safari Club convention in Billings and several leading bear outfitters told MOGA flat out that bears are not being accurately aged. 115-2

In summary, MOGA questions the need and appropriateness of adopting a proposal for bear management which will decrease hunter opportunity and success when good, hard data supporting such a move is totally absent. Our suggestion is to leave spring dates as they are and cut back on fall dates if the department feels it is necessary. Outfitters could live with all 31 elements of the Proposed Action (alternatives #1) except element "J".

Thank you for the opportunity to comment. We especially appreciate your willingness to allow these comments after the closing date in deference to our convention held Dec. 6 - 8.

Sincerely,

Jean D. Johnson
Executive Director

cc Pat Graham, Director
Jack Rich, President
Kurt Hughes, Fish and Game Committee Co-chair
Russ Smith, Fish and Game Committee Co-chair

FWP RESPONSE TO PUBLIC COMMENTS ON DRAFT BLACK BEAR EIS

K-1 The rationale for Element S has been rewritten to address the actions of people while they are living or recreating in bear habitat. The original language was intended to address human actions and practices (such as where bone yards are located) rather than broader land uses that may overlap bear habitat.

Changes in the definition of baiting will require legislative action. Table 2 has been corrected to indicate the legislature as the appropriate decision authority. Necessary legislation will be drafted and submitted to the legislature by FWP.

K-2 The question of how road closures affect black bear harvest has not been addressed by a research effort designed specifically for that purpose. However, harvest data indicate that road closures do reduce bear harvest. This observation is corroborated by results of a FWP survey of black bear hunters in 1991 that indicates that most bear hunting activity (51%) is directly associated with use of roads.

K-3 Seeding of plants palatable to bears along logging roads is recognized to attract bears and thereby increase vulnerability of bears to hunting harvest. This has prompted several of the National Forests in Montana to cease seeding of plants palatable to bears along road cuts. The act of hunting sites characterized by plants palatable to bears does not constitute baiting.

K-4 Roads closed by obliteration (recontouring and other forms of reclamation), construction of tank traps or other means to render a route inaccessible and impassable by motorized vehicles, are considered to be permanently closed. Roads to which access is regulated by gates are not considered to be permanently closed.

K-5 Although significant mortality of elk calves has been documented in local areas of Idaho and Alaska, data from Montana elk populations as well as bear studies in Montana do not indicate any comparable situations in this state. It is thought that elk calving activity in Montana is dispersed over larger geographic areas than is the case at the Idaho site where significant bear predation was noted. In the absence of data on the subject, this issue cannot be analyzed for Montana elk populations.

K-6 FWP works with "cooperator" houndsmen to pursue bears responsible for depredation problems. FWP does not foresee a need for cooperator houndsmen to subcontract with other houndsmen.

K-7 Interpretation of figures 2 and 8 (depicting black bear harvest between 1971 and 1992) must take into account the fact that significant changes in hunting season format and other restrictions have been implemented during that time span, all of which have been designed

to provide more protection to bear populations, especially the female segment. Bear harvest for each year reflects hunting regulations in place that year as well as total bear numbers.

H-1 All warm-blooded animals, including bears, are susceptible to rabies, a disease most commonly reported in skunks, bats, raccoons foxes, cattle, dogs and cats. The likelihood of encountering a rabid bear is as remote as encountering a rabid deer or elk. However, hunters should be aware of the potential for rabies exposure when confronted with any wild animal exhibiting behavior or appearance consistent with the disease. Rabies exposure could occur from handling the head of an infected animal or infected tissues from other parts of the body.

H-2 The potential that ownership of the types of firearms used by hunters will be banned is considered too remote to address in the black bear management EIS.

H-3 Tissue samples submitted to the Veterinary Molecular Biology Laboratory in Bozeman indicate a 15% trichinella infection rate among black bears harvested in Montana.

H-4 Mandatory use of meat is proposed to address hunting ethics issues (waste of usable meat) and to curtail killing of black bears solely for body parts used as trophies, or sold on the black market.

H-5 The EIS process was initiated to provide MEPA compliance for needed changes to the black bear management program.

H-6 Meat infected with trichinella can be safely consumed (by humans and pets) if it is properly cooked. However, mandatory use of meat would not apply to carcasses found to be infected with trichinella. FWP would encourage participation in the free trichinosis testing program prior to consumption (by humans or pets) of bear meat. If a person chooses not to use meat from an infected carcass, it should be disposed of in a manner that precludes scavenging of uncooked meat by pets, domestic livestock or wildlife species.

H-7 Hunting in areas of natural food sources (palatable vegetation, including mast crops) is not considered baiting. Baiting is considered transport of food items by a human with the intent of attracting an animal to a site for any purpose, whether it be hunting, viewing or photography. Such a situation would be considered baiting whether or not the party capitalizing on the bait site is the same party that placed it there.

H-8 The issue of the cost of the resident sportsman's license is separate from issues surrounding management of black bears. At this time it is not known if removal of the black bear license would affect the cost of the sportsman's license package, as determined by the legislature. When the black bear license was removed from the nonresident combination license, its cost was not reduced proportionately.

2-1 Language in the rationale for Element I has been altered to clarify that the peak of harvest vulnerability for black bears is in the spring rather than the fall.

3-1 Approaches like restricting hunter numbers, raising license fees, raising fees for non-residents, eliminating non-resident hunters, and requiring a guide for non-residents could potentially address the issue of total numbers of black bears harvested, at least on a temporary basis. However, these approaches do not effectively address the issues of female harvest levels, mistaken identification, orphaning, and hunter ethics, all of which are at the crux of public controversies surrounding black bear hunting harvest. The alternatives evaluated in this EIS were developed to address the aforementioned bear management issues.

11-1 An alternative to eliminate hunting of black bears in grizzly bear recovery areas was not developed because the end result would be very similar to Alternatives #3. Prohibition of black bear hunting in grizzly recovery areas would render substantial portions of western Montana off-limits to black bear hunting and result in transfer of hunting pressure to other areas of the state characterized by less productive bear populations. Under this scenario, any hunting in the remainder of the state would have to be strictly regulated, possibly through use of quotas and/or permits. It is also questionable whether identification and delineation of the geographic areas concerned would be practical or effective and the logistics of administering and enforcing such a regulation are questionable.

Mortality of grizzly bears attributable to the black bear hunting season (resulting from mistaken identity) was determined to be within the allowable mortality rate for recovery areas on the basis of an extensive analysis included in the five year update of the programmatic environmental impact statement on grizzly bears in NW Montana (Dood and Pac 1993).

11-2 ADC responsibility for bear depredation incidents and control actions is provided by Montana law.

12-1 Idaho's management target for female composition of harvested black bears (35%) is more conservative than the target proposed by Montana FWP (40%). The more conservative target adopted by Idaho Fish and Game is intended to compensate for the comparatively higher harvest rates achieved by hound hunters and bait hunters in Idaho, where these practices are legal. In addition to the lower vulnerability of Montana black bears (in the absence of hound hunting and baiting), historic harvest records indicate that a 40% female harvest is sustainable.

12-2 Requiring evidence of sex attached to the hide will render hunters more accountable (less opportunistic) with regard to harvest of females with dependent young and will afford the opportunity for FWP personnel to compare the date that the bear license was purchased with the date that the bear was harvested.

12-3 While FWP acknowledges the potential for this manner of illegal harvest to occur, we do not have data that indicates that it actually does occur. Mandatory hide inspection within 5 days of harvest (Element N) provides FWP an opportunity to determine how prevalent after-the-fact purchase of black bear licenses is. Mandatory inspection of the hide affords FWP the opportunity to record the date that the bear license was purchased, and compare it with the date that the bear was harvested. If after-the-fact license purchase following illegal kills is determined to constitute a problem, FWP will propose a cut-off date for purchase of black bear licenses. It is the hope of FWP that hunters who have knowledge of such violations will notify FWP enforcement personnel through use of TIPMONT or some other means.

12-4 Trend lines on the figures in question have been omitted.

12-5 Reference to hunting mortality has been added.

12-6 Correction has been made.

12-7 Potentially, conservative hunting of black bears could be more advantageous to grizzly bear population growth and density than total absence of black bear hunting, in areas where the two species coexist. Some bear researchers have speculated that in areas where black bear densities are very high, survival of subadult grizzlies, and therefore population growth, could be suppressed as a result of competition with adult black bears. While there is no definitive data to support this hypothesis, it is the reason for the differences noted between Alternatives #2 and #4 (Table 3) with respect to impacts on grizzly bear populations.

12-8 Correction has been made.

15-1 Cover scents are not, nor are they intended to be, included in the definition of "bait". The rationale for Element W has been rewritten to clarify that point. Refer to H-7.

46-1 An alternative to eliminate hunting of black bears in grizzly bear habitats was not developed because the end result would be very similar to Alternatives #3 and #4. Distribution of grizzly bears, which will continue to expand as recovery progresses, overlaps with the state's most productive black bear habitats. Prohibition of black bear hunting in grizzly bear habitats would render substantial portions of western Montana off-limits to black bear hunting. Transfer of hunting pressure from productive black bear populations in western Montana to remaining, less productive black bear populations would necessitate very strict regulation of hunting harvest, possibly through use of quotas and/or permits (similar to Alternative 3). Reduced need for hunting harvest as a management tool could result in near or total elimination of black bear hunting over remaining black bear habitat (similar to Alternative 4). Logistical problems associated with this scenario include: changing black bear distribution; identification and delineation of areas off-limits to black bear hunting; and administration and enforceability of such a regulation.

46-2 Refer to 11-2

51-1 Refer to 12-2 and 12-3.

58-1 Refer to 12-1.

71-1 Black bear hunting regulation developed for the state of Montana do not pertain to Reservations. Each Reservation in Montana administers its own wildlife management program, including its own hunting regulations. FWP does not collect harvest data for Reservations.

73-1 The initiatives outlined here will be addressed jointly by FWP and ADC as an updated black bear management program is fleshed out and implemented. Revisions to the existing black bear management program will reflect the Alternative eventually chosen by FWP.

79-1 It is widely accepted that archery equipment provides an effective means of harvesting many wildlife species, including black bears. However, the absence of information demonstrating whether use of archery equipment - or any other type of hunting implement - is either inhumane or humane, precludes analysis of the issue. FWP does have a concern for humane treatment and harvest of wildlife and we focus our efforts in that arena on the people who will be using various hunting implements. Primary efforts in this arena, often conducted in cooperation with hunter organizations, include emphasis on hunter proficiency and ethics in all hunter information and education programs and informational materials.

81-1 FWP concurs that such practices constitute a serious ethics issue, as well as a factor that could contribute to the incidence of mistaken identity of sex and/or species. Increased emphasis on hunter ethics (Element L) is paramount to curtailing such activity.

81-2 Correction has been made.

85-1 An analysis of grizzly bear mortality attributable to black bear hunters was included in the update to the final grizzly bear EIS (Dood and Pac 1993). During the period 1975-1990, 15 grizzly bear mortalities attributable to black bear hunters were documented. This level of mortality was within the allowable mortality quotas established for the state's grizzly bear populations and the authors determined that it did not result in negative impacts to grizzly bear populations or grizzly recovery.

85-2 Refer to 46-1

91-1 Refer to 46-1

96-1 As explained on pages 44-46, the black bear is a species that does not lend itself to census. Status and trend of black bear populations in Montana, as well as other states and

provinces, are therefore monitored indirectly, using widely accepted methods of analyzing multiple population and harvest parameters.

96-2 This FEIS marks completion of the environmental analysis of black bear management in Montana. The purpose of the draft EIS is to assure that all needed corrections, clarifications and other changes are brought to light so they can be incorporated in the final EIS. Public hearings and a public comment period were a means to achieve this. An environmental analysis is an analysis process, not a statement of decision. A FWP decision identifying the alternative chosen will be issued following a 15-day public review period to begin January 21, 1994.

101-1 From 1959 through 1970, the black bear hunting season opened in mid-March and continued through the end of the big game hunting season. Reductions in hunting season length during the early 1970s, followed by elimination of summer hunting during the late 1970s, resulted in a black bear hunting season format featuring a spring hunting season and a fall hunting season. Spring hunting harvest does not serve a biological purpose but has been maintained to provide recreational opportunity desired by black bear hunters and has traditionally been thought to be a means of curtailing nuisance bear complaints and depredation problems attributable to adult and subadult male bears.

106-1 15-1 Cover scents are not, nor are they intended to be, included in the definition of "bait". The rationale for Element W has been rewritten to clarify that point. Refer to H-7.

107-1 The EIS process and formulation of the Proposed Action were prompted by increasing concern by FWP biologists in recent years about apparent declines in age of harvested bears (as determined through analysis of tooth data). Tables 3 through 7 (Appendix 7) illustrate that the mean age of harvested bears currently approaches or exceeds levels that warrant management actions designed to achieve a more conservative hunting harvest (Element M; Table 1 in Appendix 8). Management targets outlined in Element M are designed to function as safeguards to prevent hunting harvest, especially of females, from becoming excessive.

107-2 Elimination of spring hunting (Alternative #2) or increased regulation of spring hunting harvest (Alternative #3) reduce the need for protection of bears during the period of the fall that they are most vulnerable. FWP acknowledges that incorporation of the later fall opening date (Element I) in either Alternative would extend additional, significant protection to bear populations.

107-3 Alternative #3 is presented as an approach that would provide protection to female bears while maintaining some spring hunting harvest. Female harvest quotas are currently in use in central Montana (Region 5). While harvest quotas work satisfactorily in some situations, quotas are not a panacea. In fact, broad application of harvest quotas could potentially result in less discriminate harvest (in terms of species, sex and reproductive status). Harvest quotas can prompt some hunters to be less selective in harvesting an animal.

This competitive impulse is fueled by the hunter's feeling that if he doesn't take the first animal he sees, the season may end before he gets another opportunity. Although the objective of a harvest quota is to better regulate hunting harvest, use of quotas can potentially backfire.

107-4 The combination of Elements included in each Alternative maintains flexibility for FWP to tailor hunting regulations to individual bear management units. However, the more complicated and the more inconsistent hunting regulations are for any species, the more confusion they cause and the harder they are to administer and enforce. FWP will bear this consideration in mind when making hunting season recommendations.

107-5 During the period 1975 to 1991, 15 grizzly bear mortalities attributable to black bear hunters were recorded in Montana, most of which occurred during the month of May. Most of these mortalities occurred in the Northern Continental Divide Ecosystem and occurred at intervals of space and time that prevented disproportionate impacts to any local grizzly bear population.

107-6 FWP Goals outlined on page 5 reflect the wildlife program that has been developed under the broad statutory authority of 87-1-201, MCA.

107-7 No direct evidence of the effects of hunting on bear behavior exists. However, indirect evidence that hunting promotes wariness of humans is available from studies on remnant bear populations (Mysterud 1977, Elgmork 1978). It indicates that bears survive because of genetic selection and learned behavior in avoiding confrontation and withdrawing from human contact. Other indirect evidence comes through experiences of researchers who indicate that hunting keeps bears wary of man (Jonkel 1975, Servheen 1981). Stokes (1970) suggested that national parks are valuable for examination of this question because park wildlife is less wary than wildlife subjected to hunting. Population models used by Bunnell and Tait (1980) made the assumption that the behavioral characteristics of some bears render them more likely to be shot than other bears, and that they continue to exhibit this behavior until they are killed. They suggested that average vulnerability of a particular age group declines with age as a result of learning or loss of the more vulnerable animals.

To our knowledge, research efforts have not specifically addressed effects of hunting on maintaining wariness of humans. But this cause and effect relationship has been widely assumed and accepted (page 16) and is corroborated by the difference in interactions between unhunted (and/or habituated) bear populations and humans (in National Parks and other locations where bears are habituated to humans) and interactions between hunted (and characteristically un-habituated) bear populations and humans. Habituation of bears to humans is widely accepted to lead to human/bear conflicts, which in most situations result in elimination of the bear.

107-8 Validation of the technique used to determine age of bears (cementum analysis of a premolar) indicate that it is extremely accurate (Figure 1 Appendix 7). The statement by Gary Matson of Matson Labs (rationale for Element D) refers to the fact that accuracy of this technique is at least as accurate for black bears as it is for grizzly bears, and in most cases more accurate. He attributes this to the clarity of cementum annuli in black bear teeth, as compared to cementum annuli in grizzly bear teeth. It can't be said to always be more accurate because the accuracy of the technique declines (for both species) for older bears, most notably those in the 18 to 25 age group.

107-9 The prohibition on use of hounds to hunt or pursue bears is printed in the black bear hunting regulations. We believe this prohibition is more widely known among houndsmen, who have attempted on several occasions to remove it through legislative initiative, than it is among the general public.

110-1 Use of bear meat for pet food would meet the requirement of mandatory use of bear meat. FWP recommends that bear meat be properly cooked, whether it is to be consumed by humans or pets.

115-1 The concern that FWP biologists have about black bear populations is not directed to total numbers harvested, but sex and age composition of bears harvested. Overharvest of the productive female segment of black bear populations would result in increased incidence of orphaning, followed by declines in production and recruitment, followed by a population decline. Data indicating that sex and age composition of harvested black bears is currently at levels warranting more conservative harvest regulations is presented in Figures 8 - 12 in Appendix 2 and Tables 1-7 in Appendix 7. This data is also referred to in the text of the EIS. Concerns about sex and age structure of the state's bear population prompted evaluation of the current management program, followed by formulation of the Proposed Action and finally, this environmental analysis (EIS).

115-2 Refer to 107-8. Analysis of tooth data is critical to obtaining reliable age information because since physical characteristics such as size and weight, are notoriously unreliable indicators of age for bears. Size and weight of a bear reflects its recent and current nutrition and reproductive status, which may fluctuate substantially from season to season and year to year.

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